

andrew.armstrong12/2013 12:11:40 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.plt \\pwworking\hmm\external\andrew.armstrong-arup.com\dms82479\W-FB-SV-1050-K5.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>

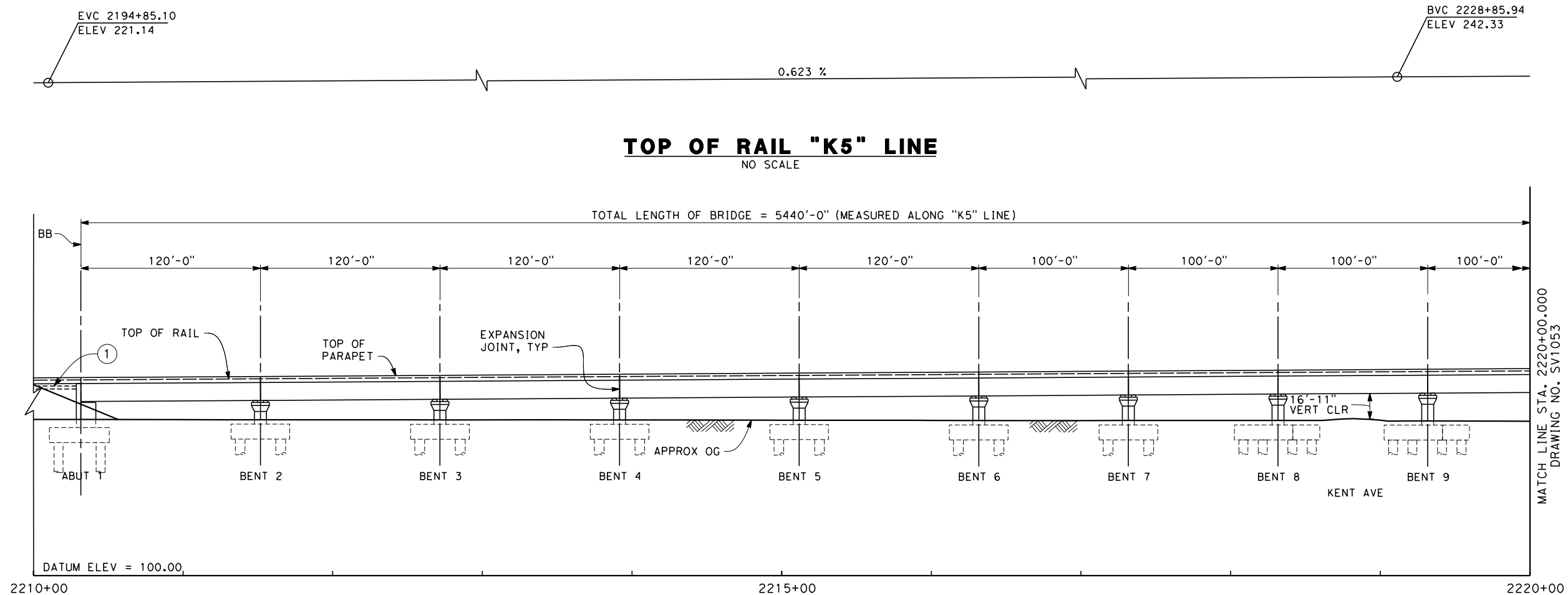


<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K5 BNSF VIADUCT KEY MAP

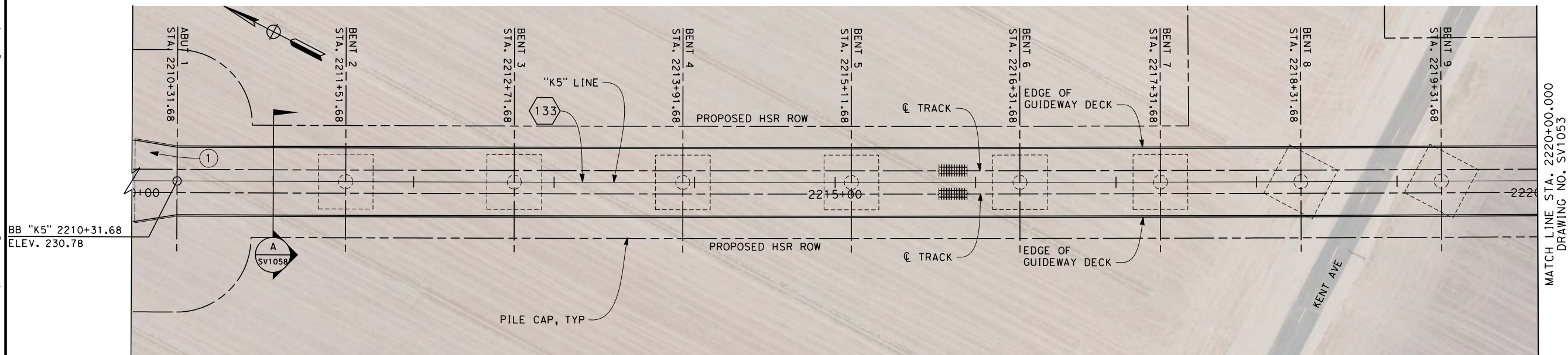
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1050
SCALE AS SHOWN
SHEET NO. 1 OF 8



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andrew.armstrong 12/12/2013 2:12:04 PM



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST  
IN-SITU  
STEEL TRUSS - INSITU, SLID  
OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND  
INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

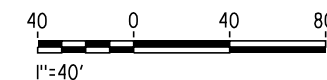
133

R = 100000.00'

Δ = 15° 08' 39.6"

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**

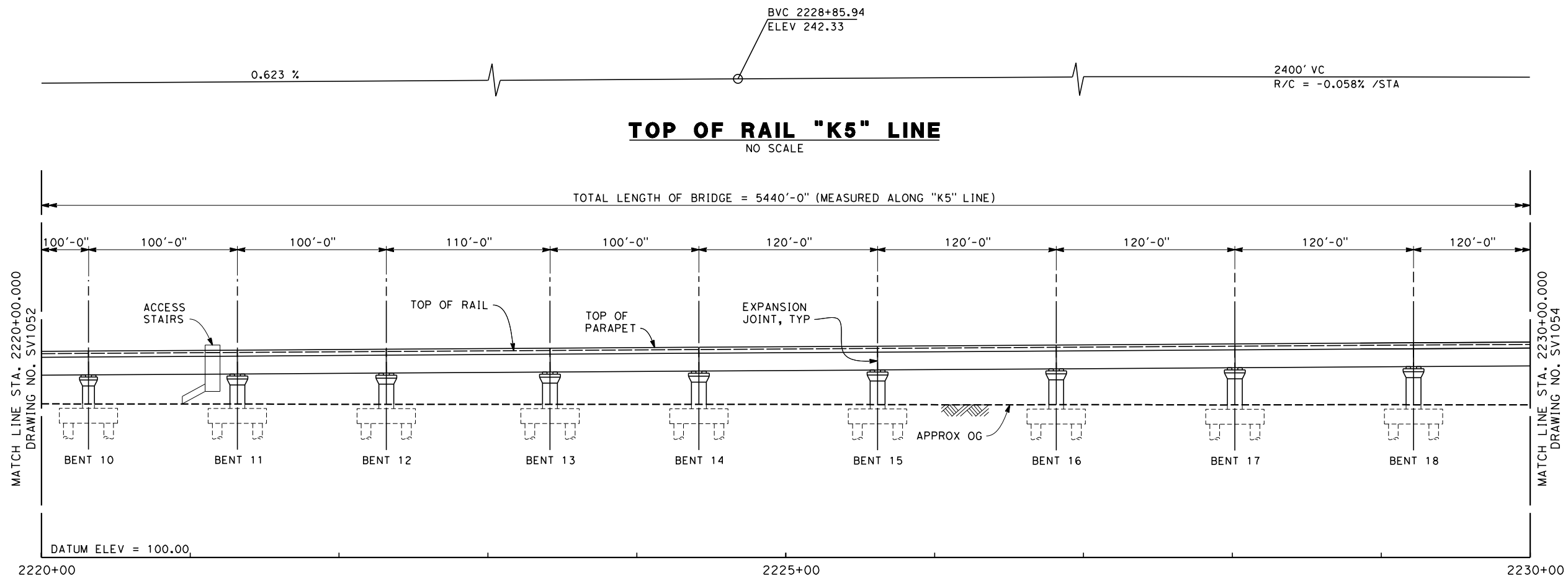


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

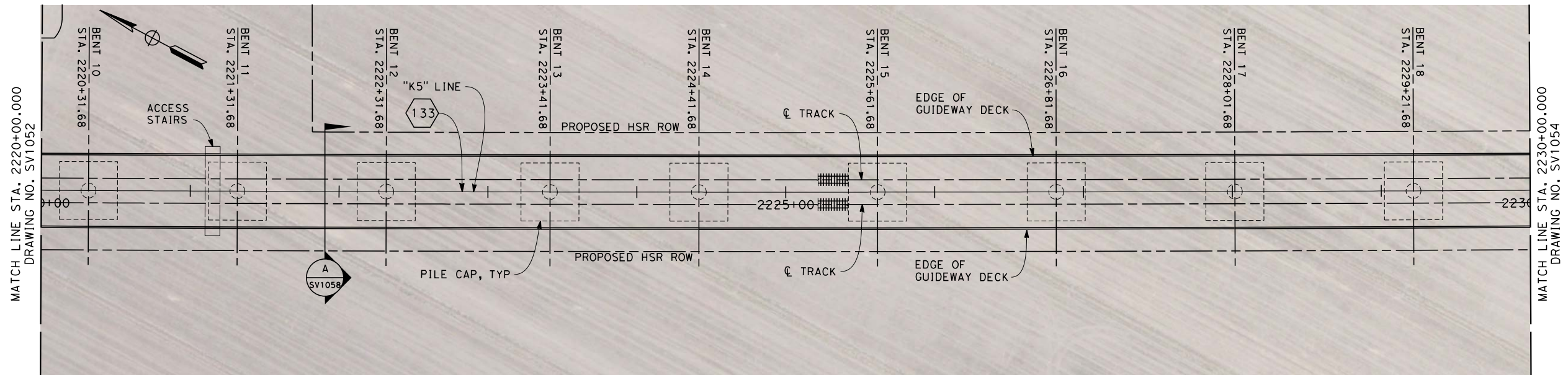
KAWEAH SUBSECTION  
ALIGNMENT K5  
BNSF VIADUCT  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1052
SCALE AS SHOWN
SHEET NO. 2 OF 8

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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

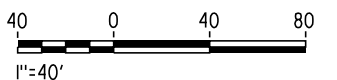
133

R = 100000.00'

$\Delta = 15^\circ 08' 39.6''$

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

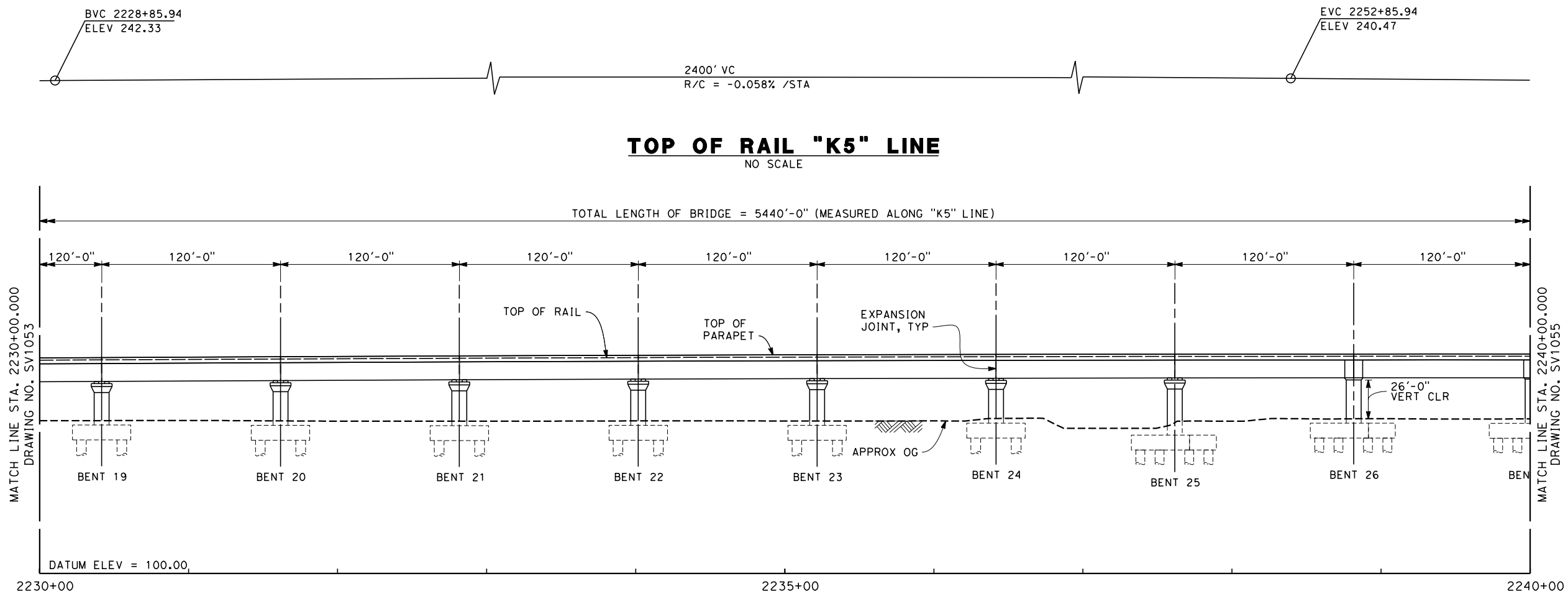
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<b>NOT FOR CONSTRUCTION</b>



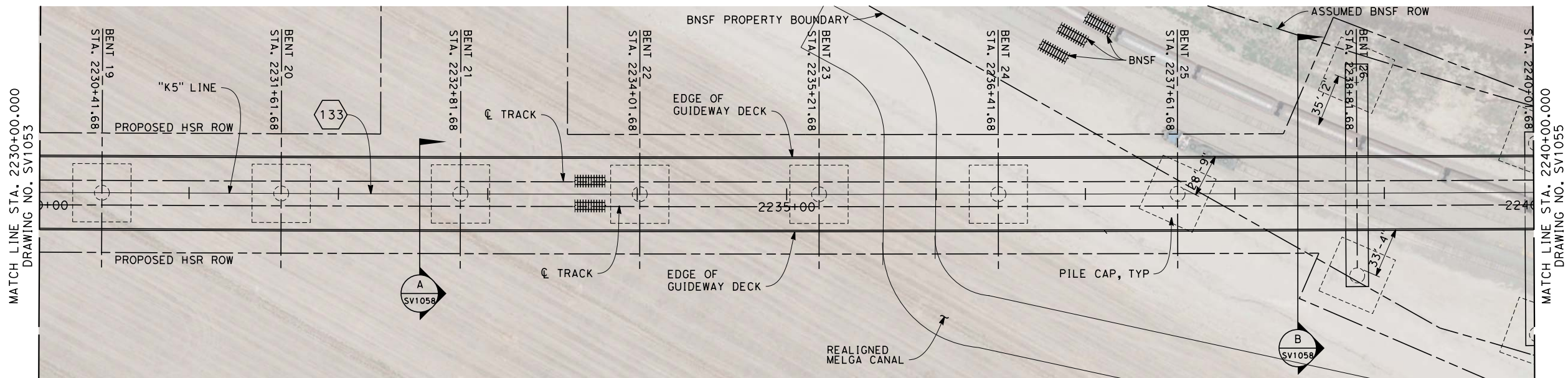
<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>	CONTRACT NO. HSR 06-0003
KAWEAH SUBSECTION ALIGNMENT K5 BNSF VIADUCT PLAN AND ELEVATION	DRAWING NO. SV1053
	SCALE AS SHOWN
	SHEET NO. 3 OF 8



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andrew.armstrong 2/12/2013 2:12:38 PM



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

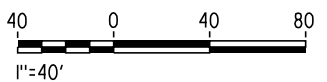
133

R = 100000.00'

Δ = 15° 08' 39.6"

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



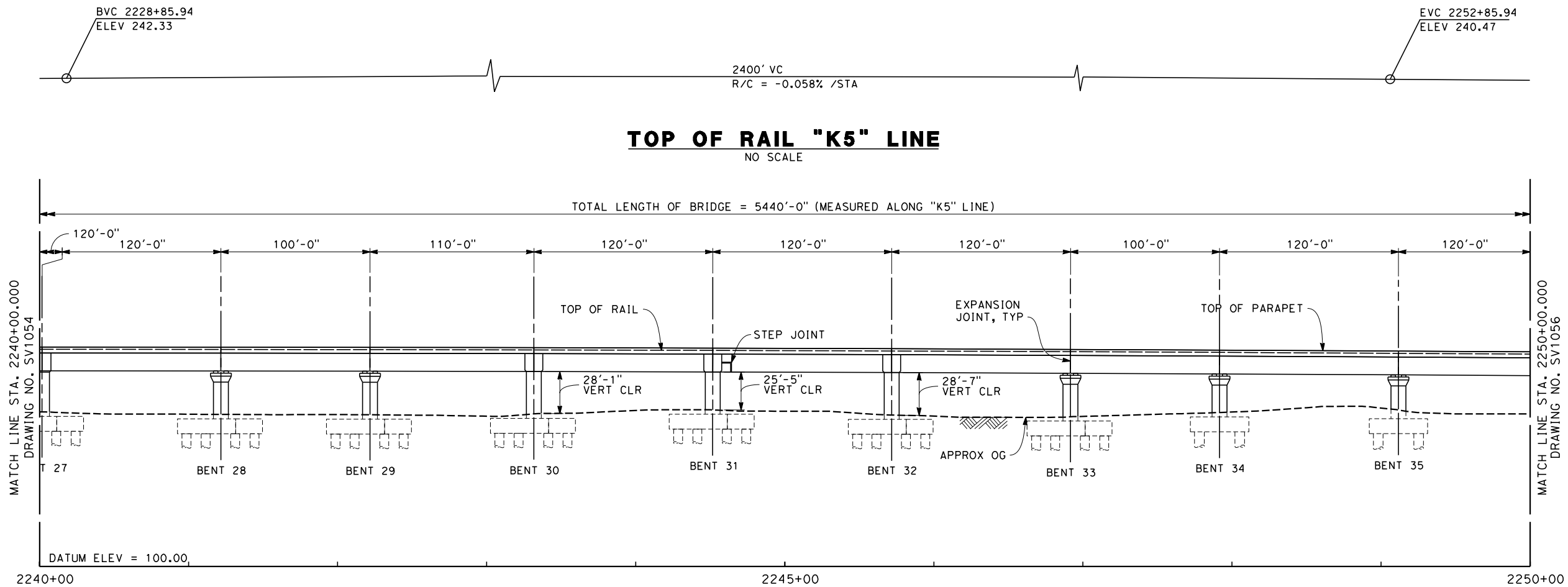
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
BNSF VIADUCT  
PLAN AND ELEVATION

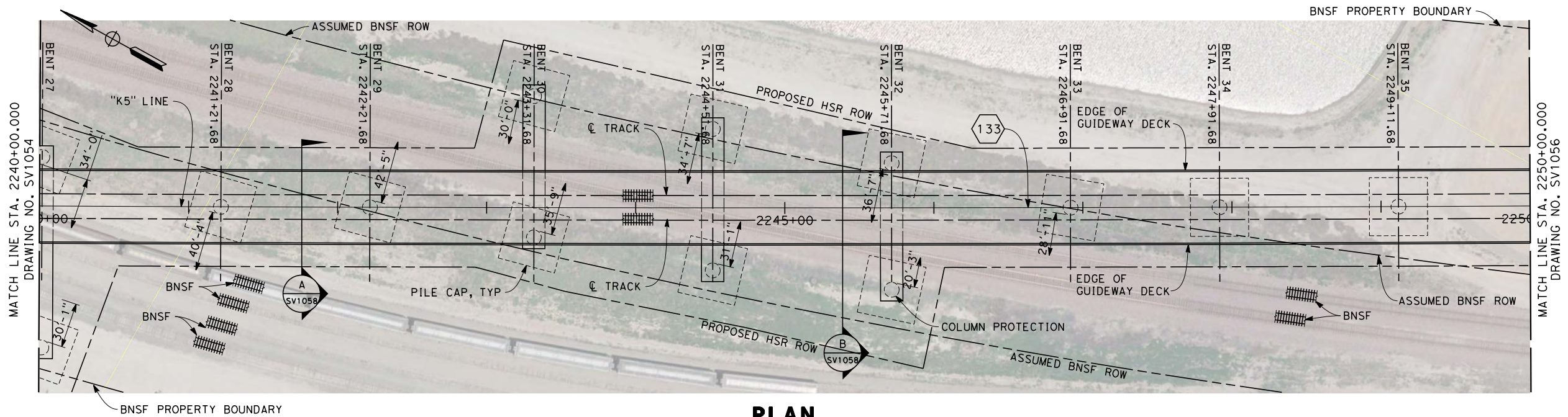
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1054
SCALE AS SHOWN
SHEET NO. 4 OF 8



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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

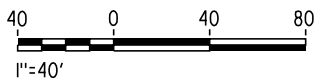
133

R = 100000.00'

Δ = 15° 08' 39.6"

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

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CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



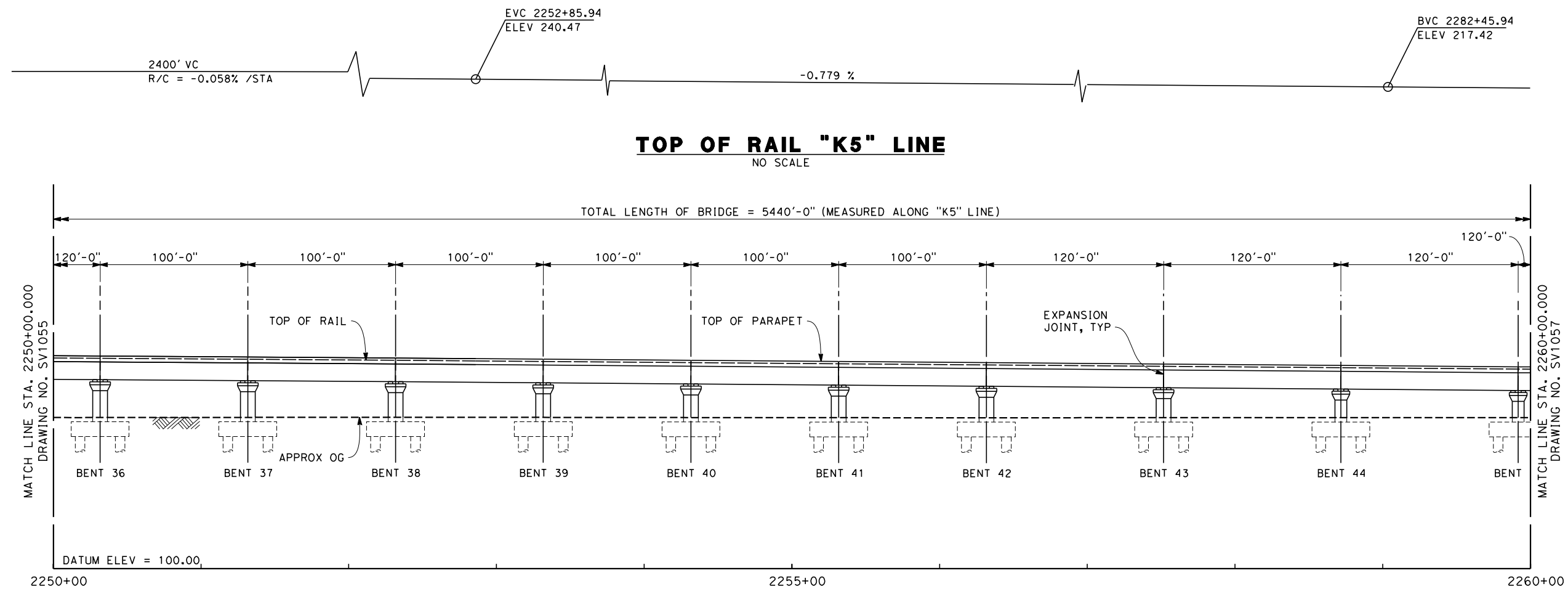
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
BNSF VIADUCT  
PLAN AND ELEVATION

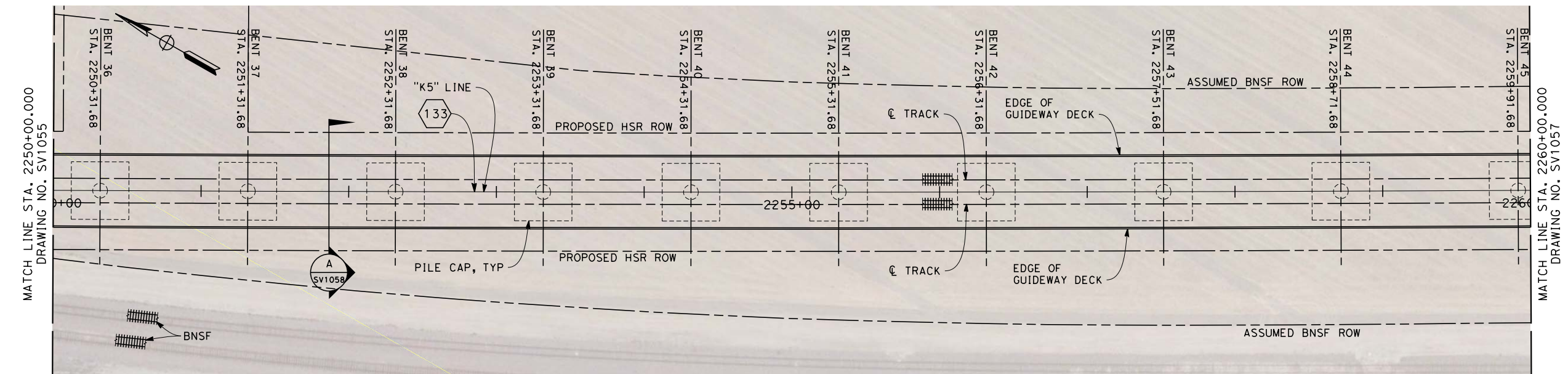
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1055
SCALE AS SHOWN
SHEET NO. 5 OF 8



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andrew.armstrong 2/12/2013 2:13:26 PM



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST  
IN-SITU  
STEEL TRUSS - INSITU, SLID  
OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND  
INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

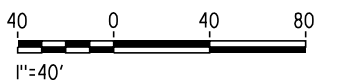
① 133

R = 100000.00'

Δ = 15° 08' 39.6"

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



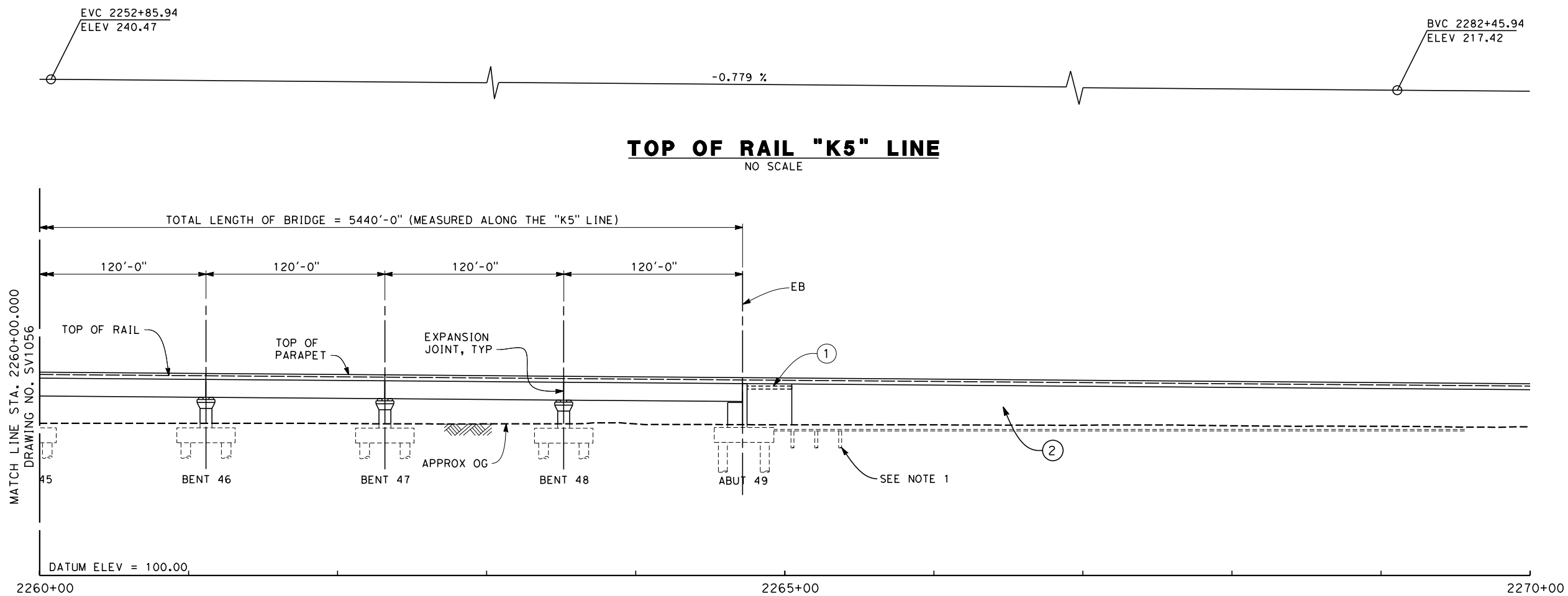
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
BNSF VIADUCT  
PLAN AND ELEVATION

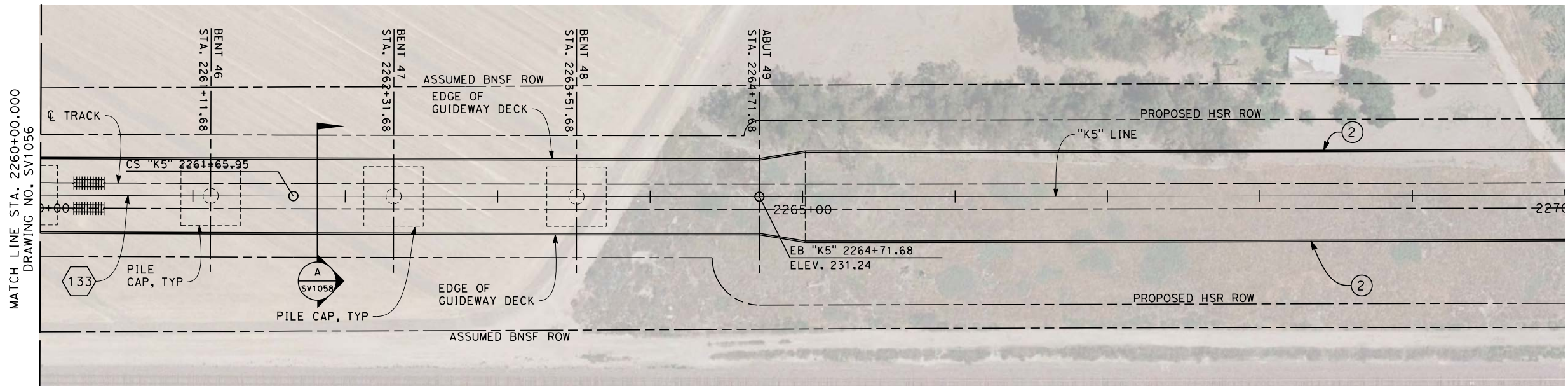
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DRAWING NO. SV1056
SCALE AS SHOWN
SHEET NO. 6 OF 8



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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

133

R = 100000.00'

Δ = 15° 08' 39.6"

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



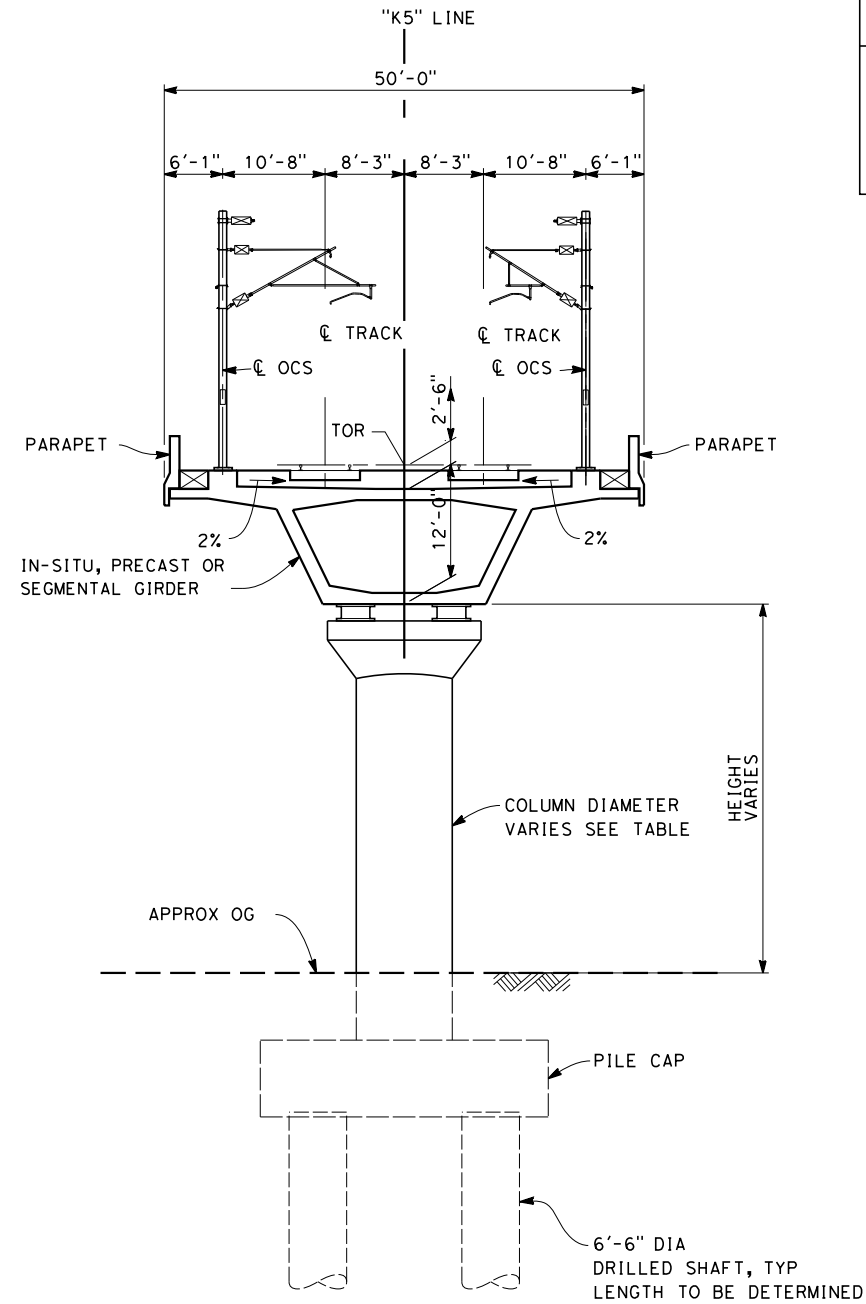
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
BNSF VIADUCT  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1057
SCALE AS SHOWN
SHEET NO. 7 OF 8



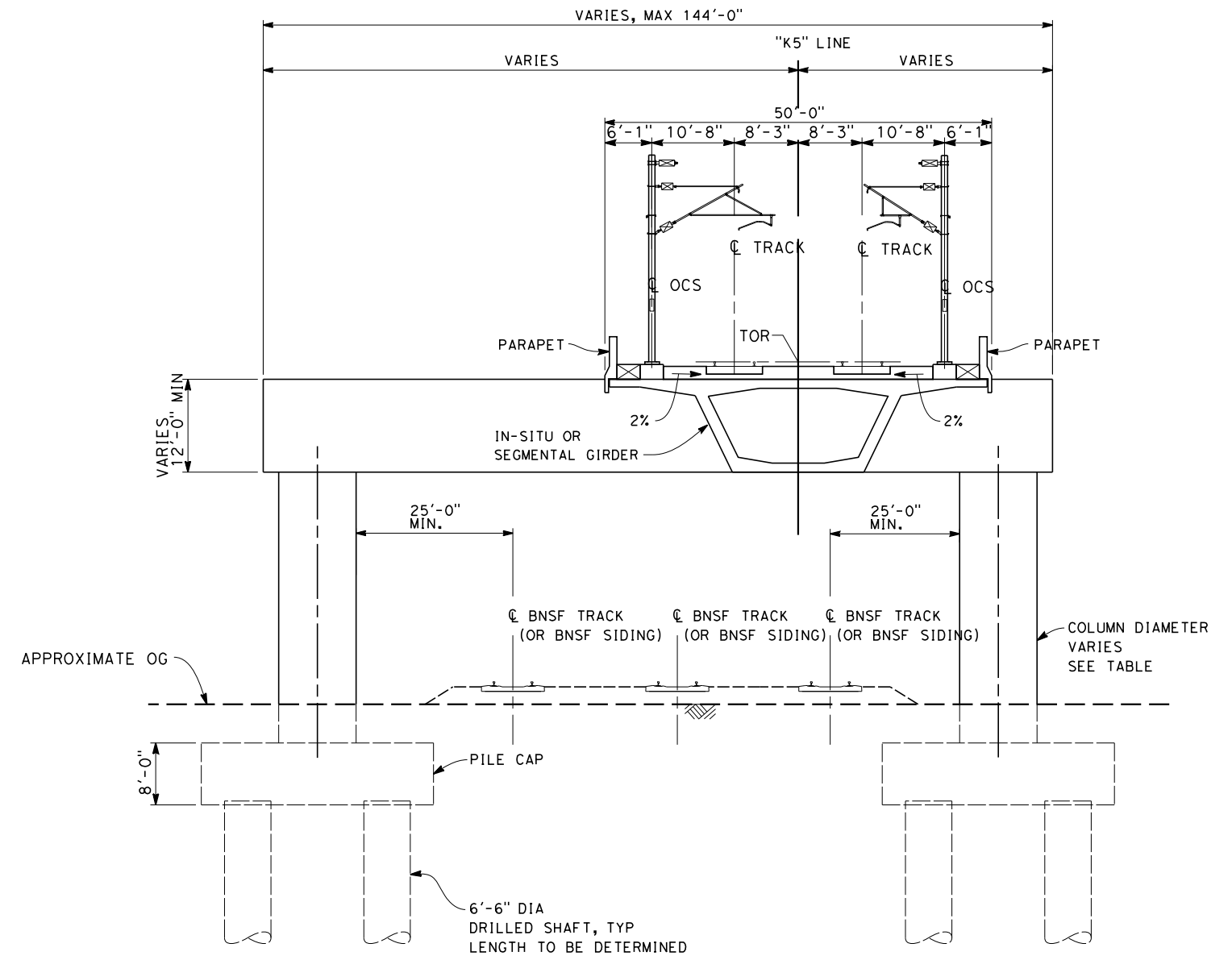
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### SECTION A

SCALE: 1" = 10'

STA 2210+32 THROUGH 2238+82  
STA 2240+02 THROUGH 2243+32  
STA 2245+72 THROUGH 2264+72



### SECTION B

SCALE: 1" = 10'

STA 2238+82 THROUGH 2240+02  
STA 2243+32 THROUGH 2245+72



REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K5 BNSF VIADUCT TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1058
SCALE AS SHOWN
SHEET NO. 8 OF 8



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
M. FISHER  
DRAWN BY  
F. PALERMO  
CHECKED BY  
A. ARMSTRONG  
IN CHARGE  
R. COFFIN  
DATE  
12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**  
  
**NOT FOR  
CONSTRUCTION**

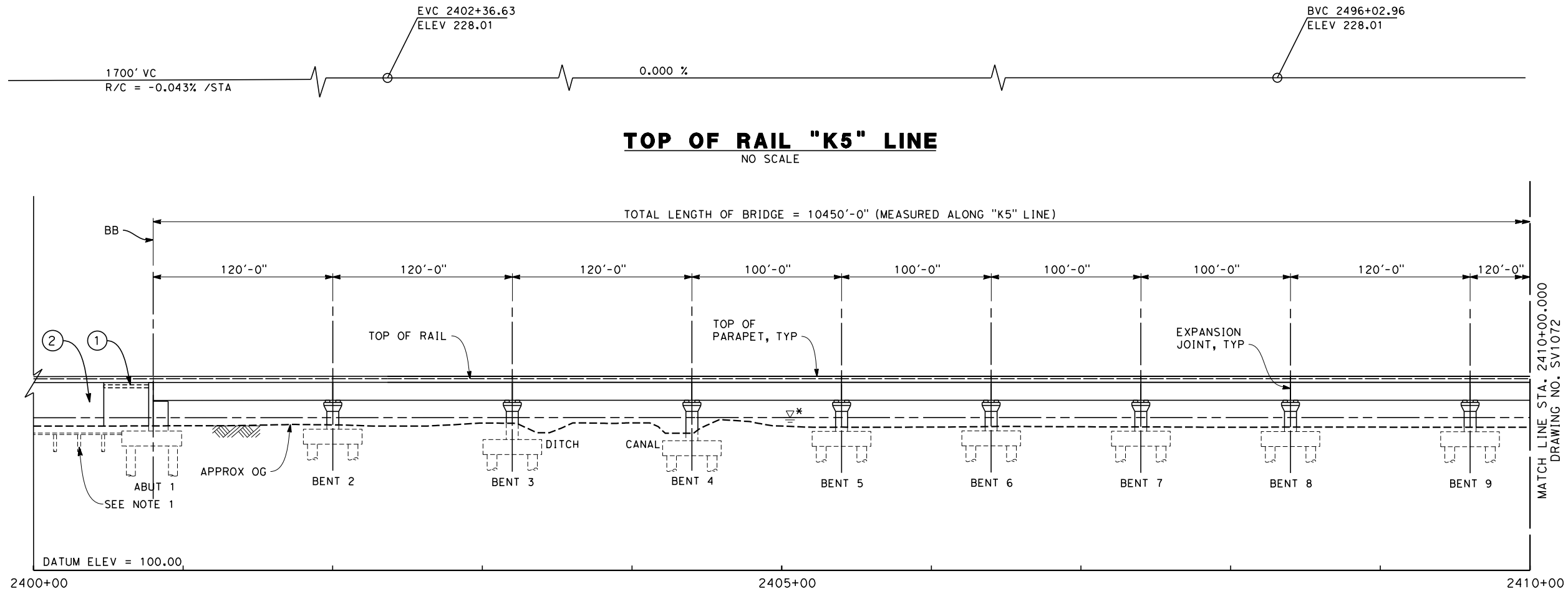


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**  
KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
KEY MAP

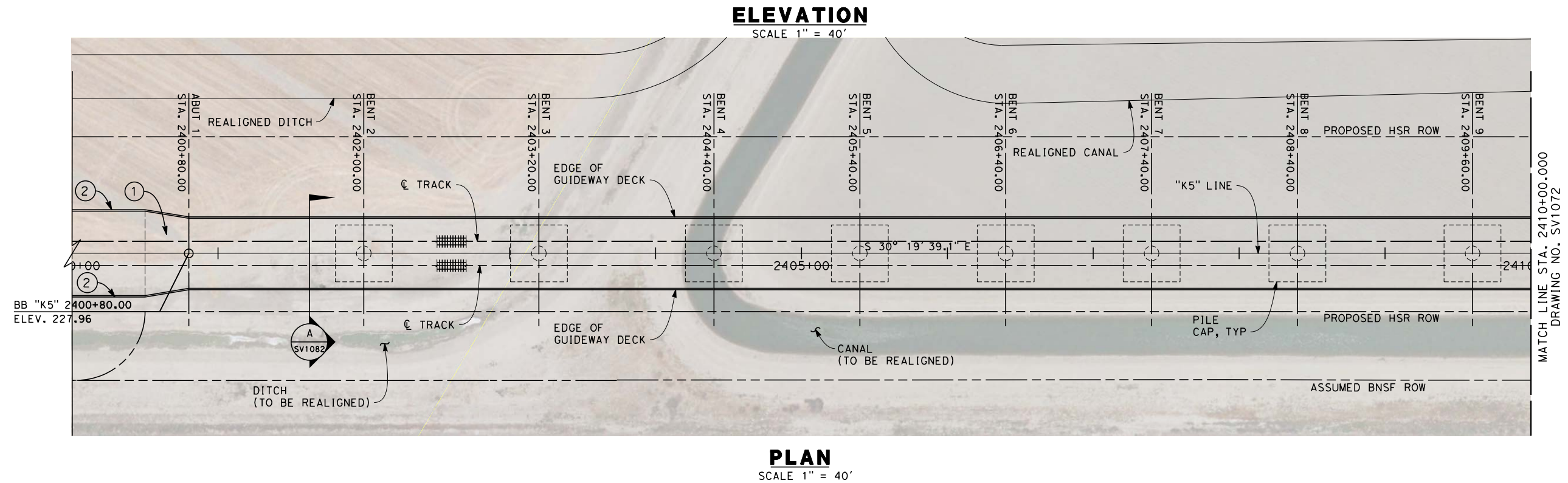
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DRAWING NO.  
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AS SHOWN  
SHEET NO.  
1 OF 14



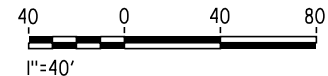
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- NOTES**
1. NOT ALL PILES SHOWN
  2. PILE LENGTH TO BE DETERMINED
  3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
  4. UTILITY LOCATIONS TO BE DETERMINED
  5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
  - \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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DESIGNED BY M. FISHER
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DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



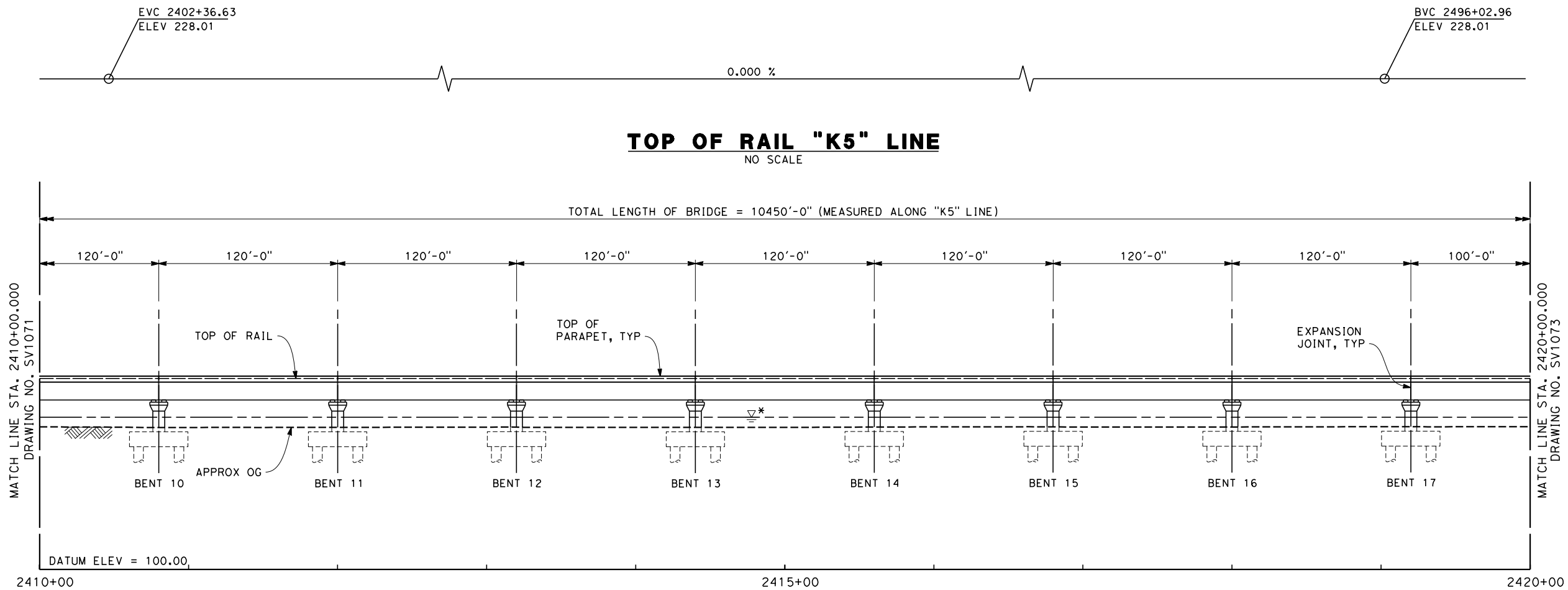
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

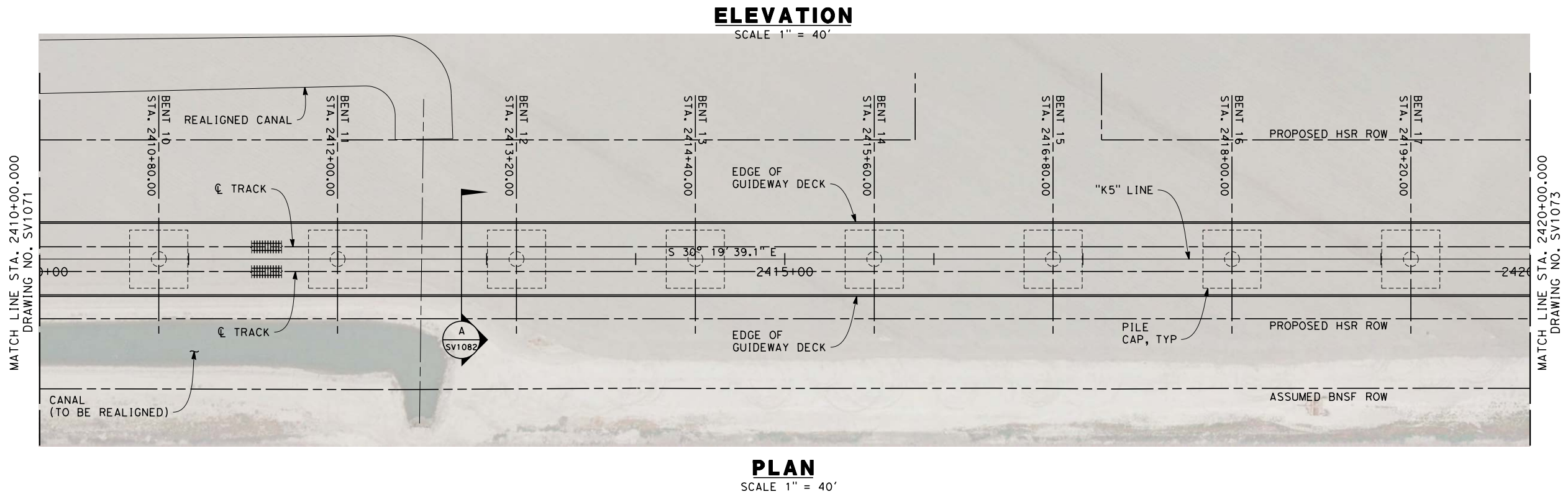
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SCALE AS SHOWN
SHEET NO. 2 OF 14



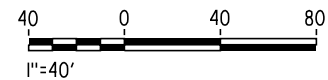
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- NOTES**
1. NOT ALL PILES SHOWN
  2. PILE LENGTH TO BE DETERMINED
  3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
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- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
  - \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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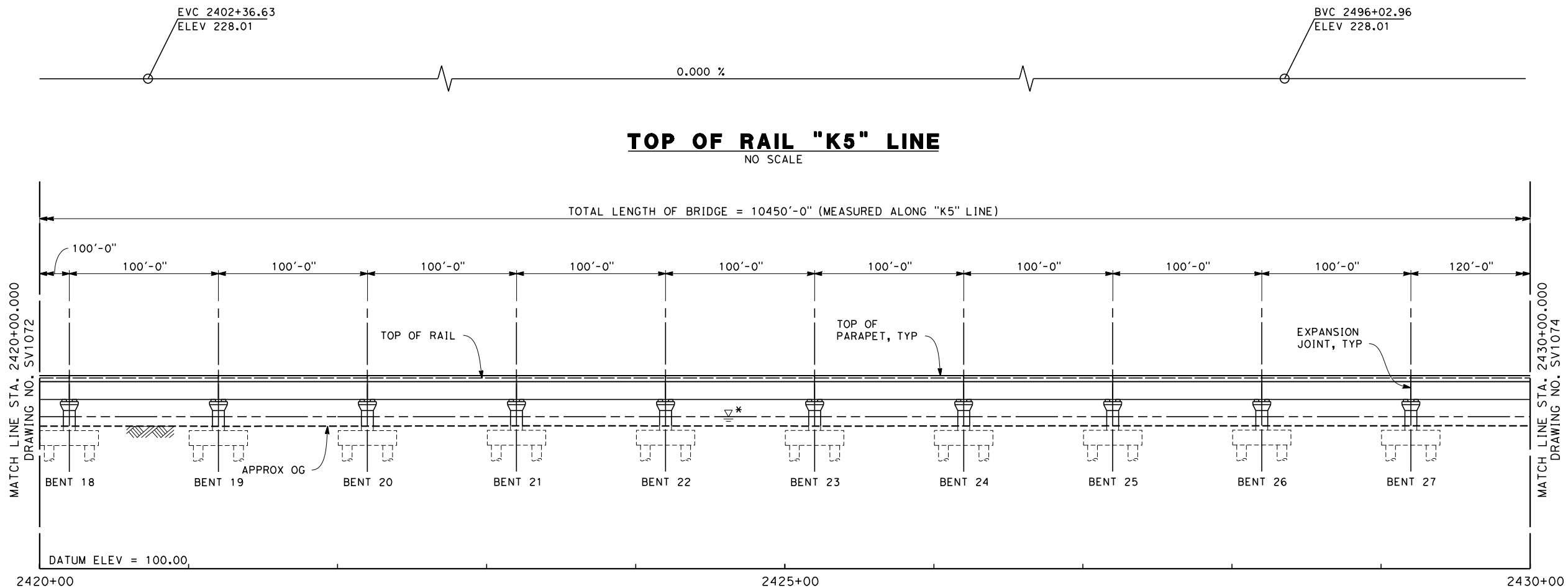
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

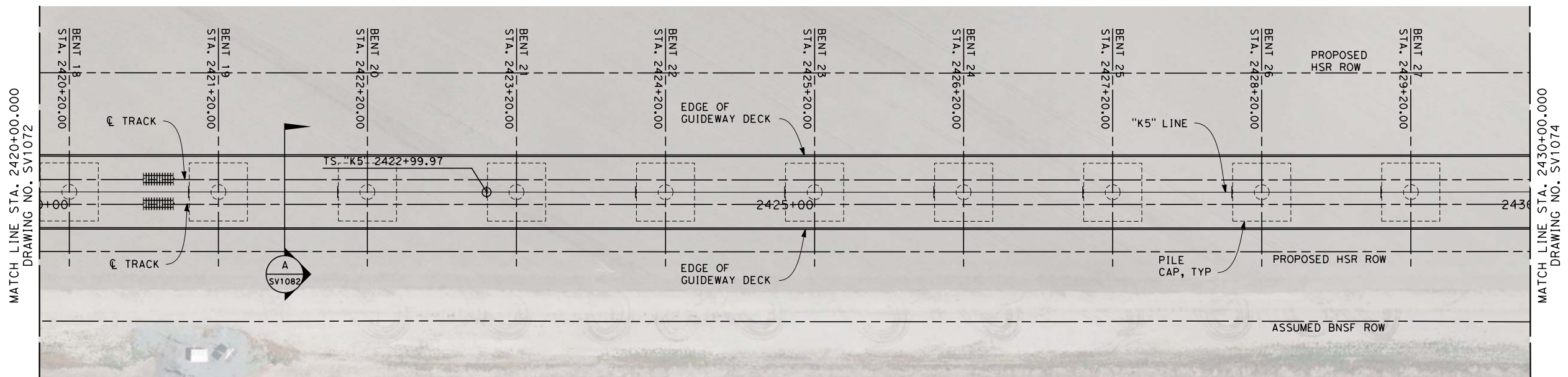
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DRAWING NO. SV1072
SCALE AS SHOWN
SHEET NO. 3 OF 14



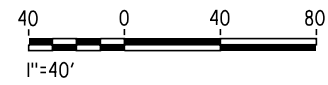
c:\pwworking\hmm\external\andrew.armstrong-arup.com\dms82479\W-FB-SV-1073-K5.dgn 12/12/2013 2:14:52 PM andrew.armstrong



- NOTES**
1. NOT ALL PILES SHOWN
  2. PILE LENGTH TO BE DETERMINED
  3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
  4. UTILITY LOCATIONS TO BE DETERMINED
  5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
  - \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**

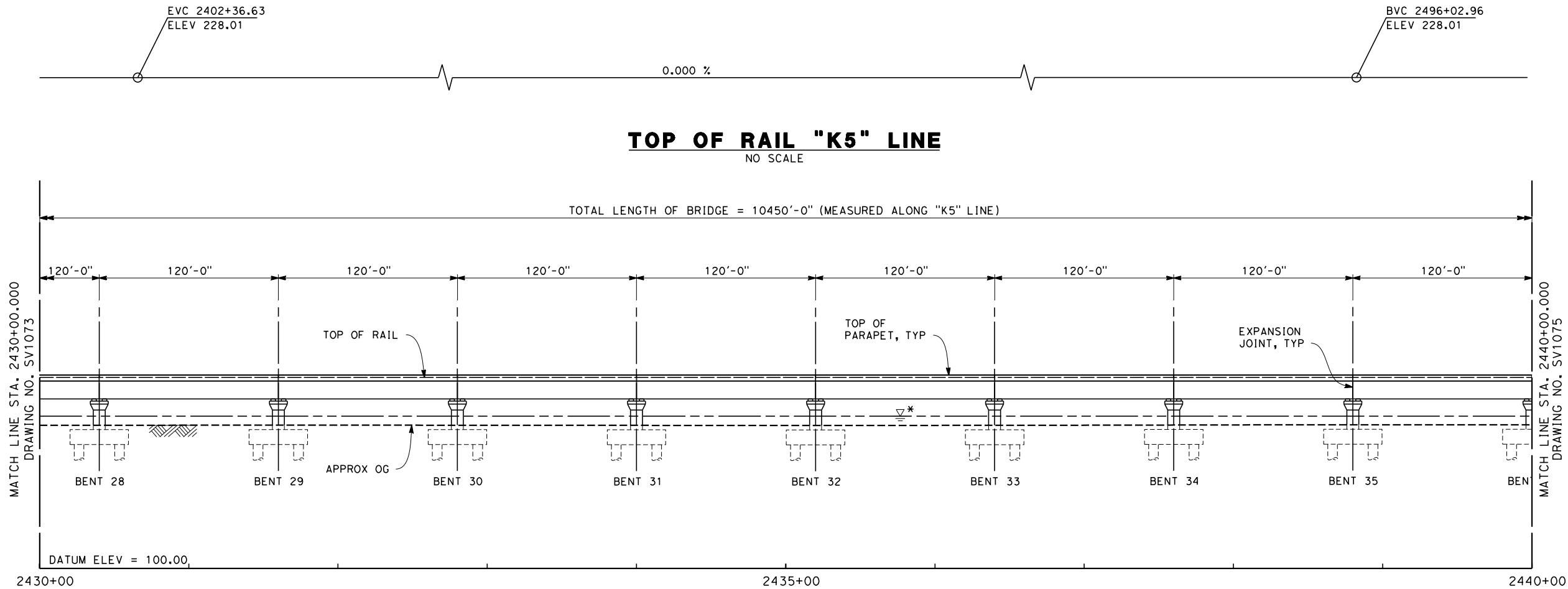


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

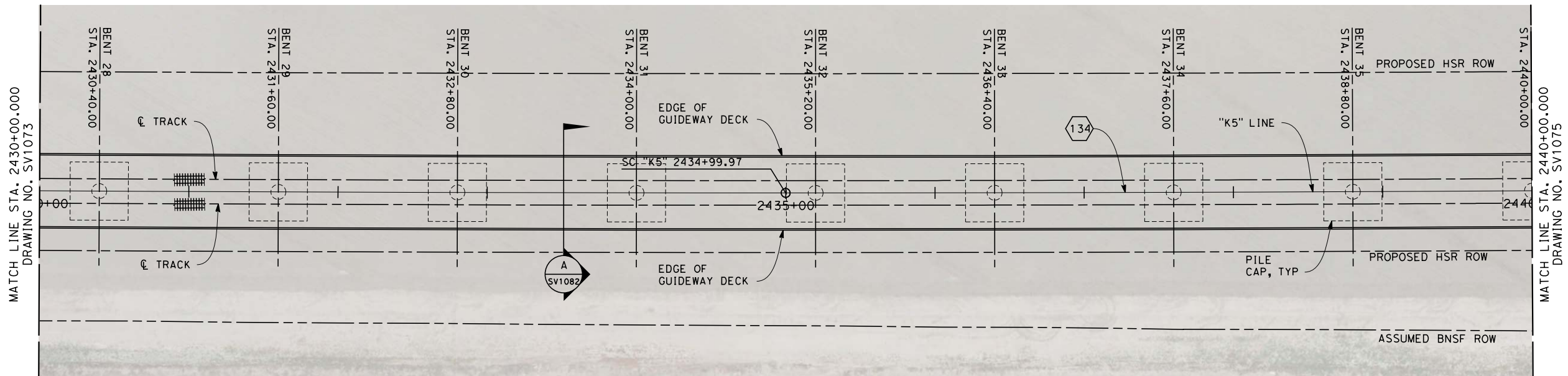
KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1073
SCALE AS SHOWN
SHEET NO. 4 OF 14

c:\pwworking\hmm\external\andrew.armstrong-arup.com\dms82479\W-FB-SV-1074-K5.dgn  
andrew.armstrong 12/12/2013 2:15:08 PM



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

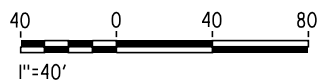
134

R = 85000.00'

$\Delta = 0^\circ 50' 01.6''$

T = 618.5'

L = 1236.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



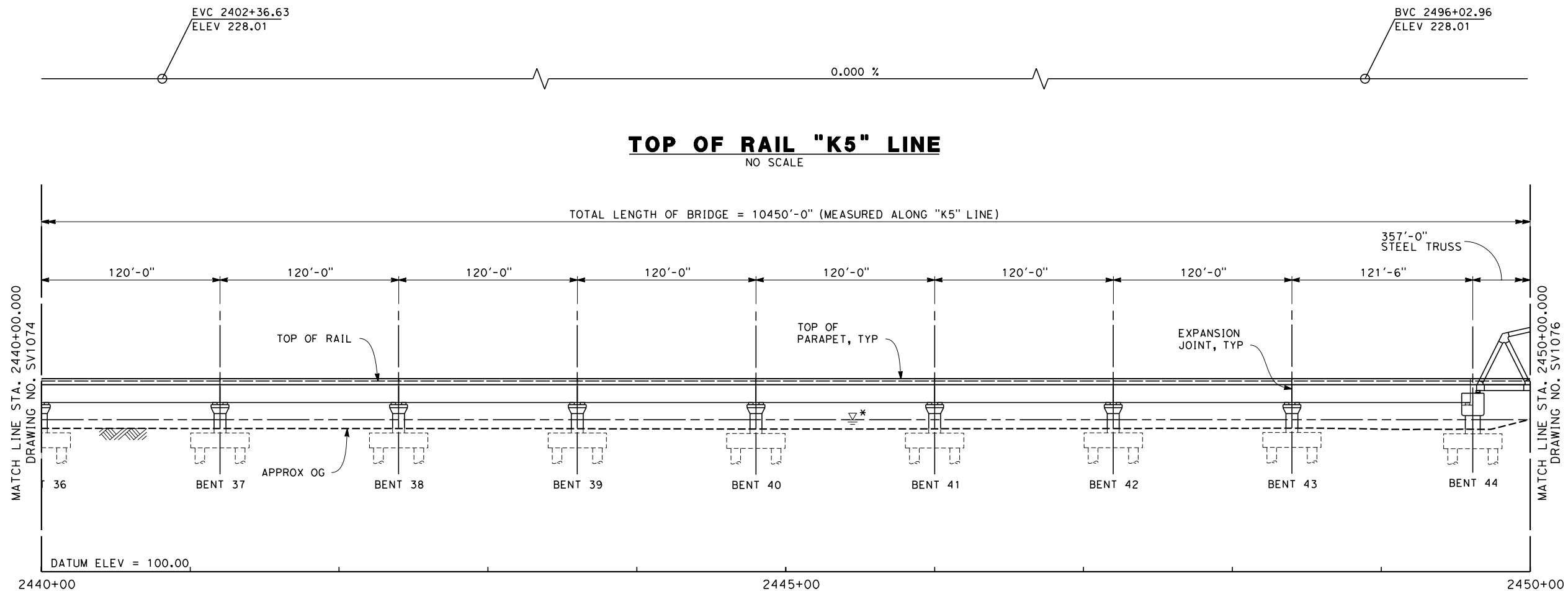
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

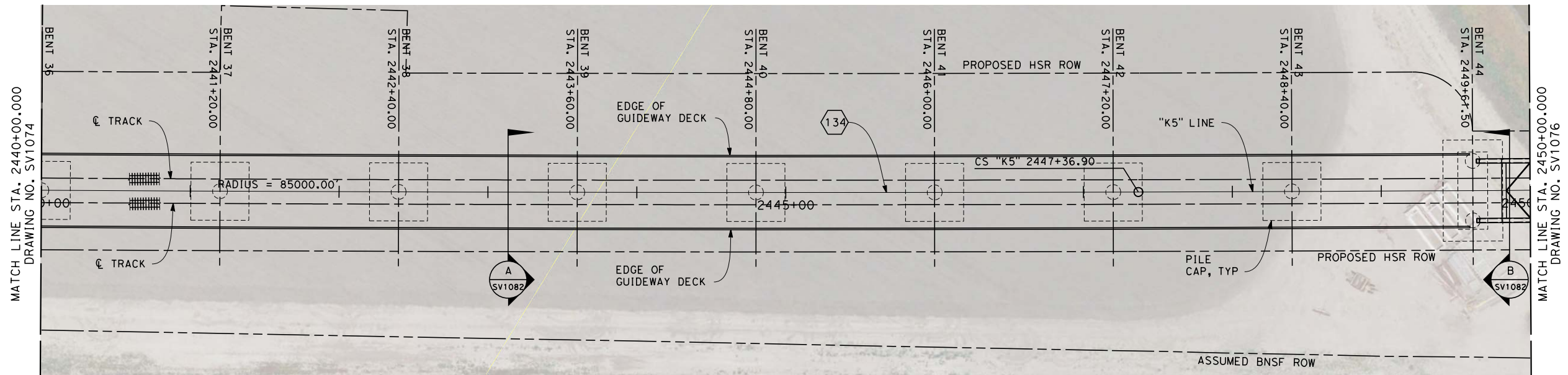
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1074
SCALE AS SHOWN
SHEET NO. 5 OF 14



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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

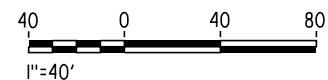
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

⑬④  
R = 85000.00'  
Δ = 0° 50' 01.6"  
T = 618.5'  
L = 1236.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

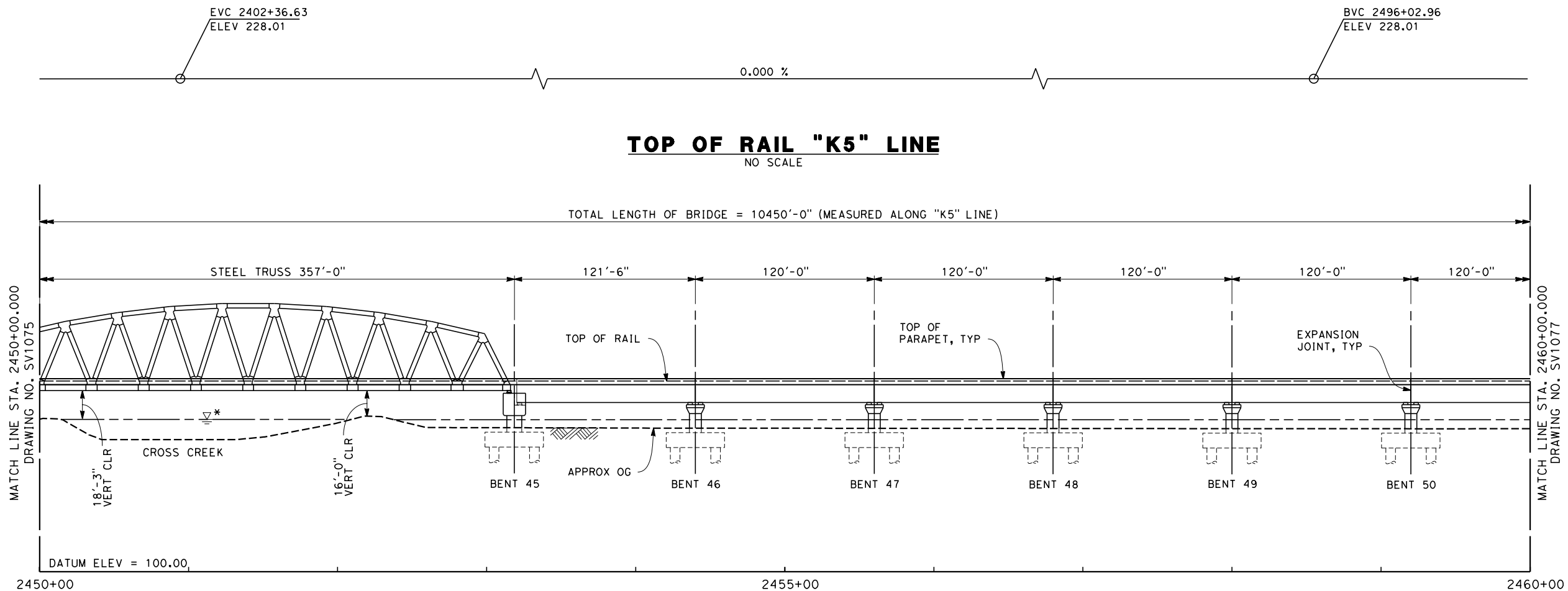
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<b>NOT FOR CONSTRUCTION</b>



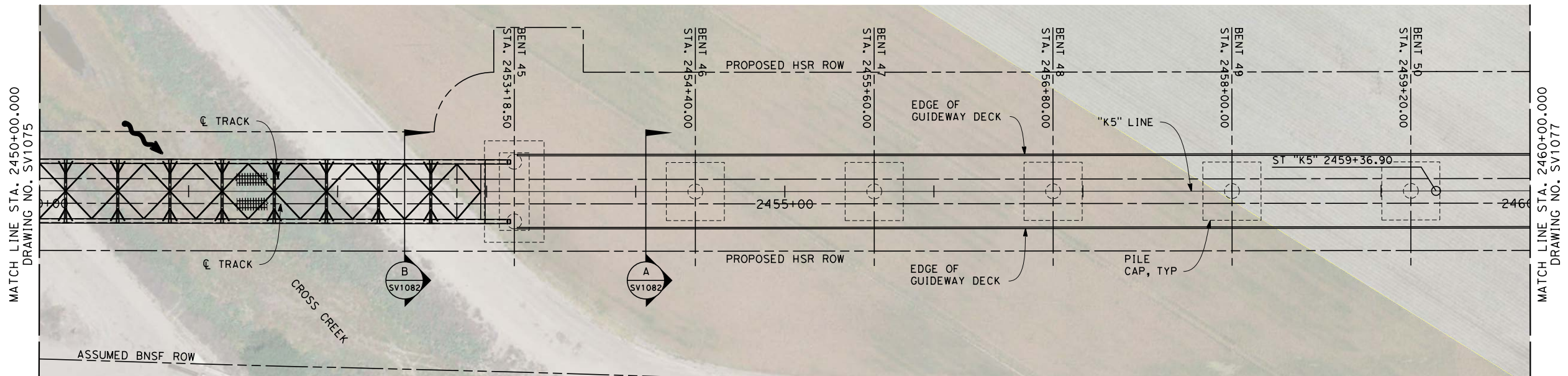
<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K5 CROSS CREEK VIADUCT PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1075
SCALE AS SHOWN
SHEET NO. 6 OF 14

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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



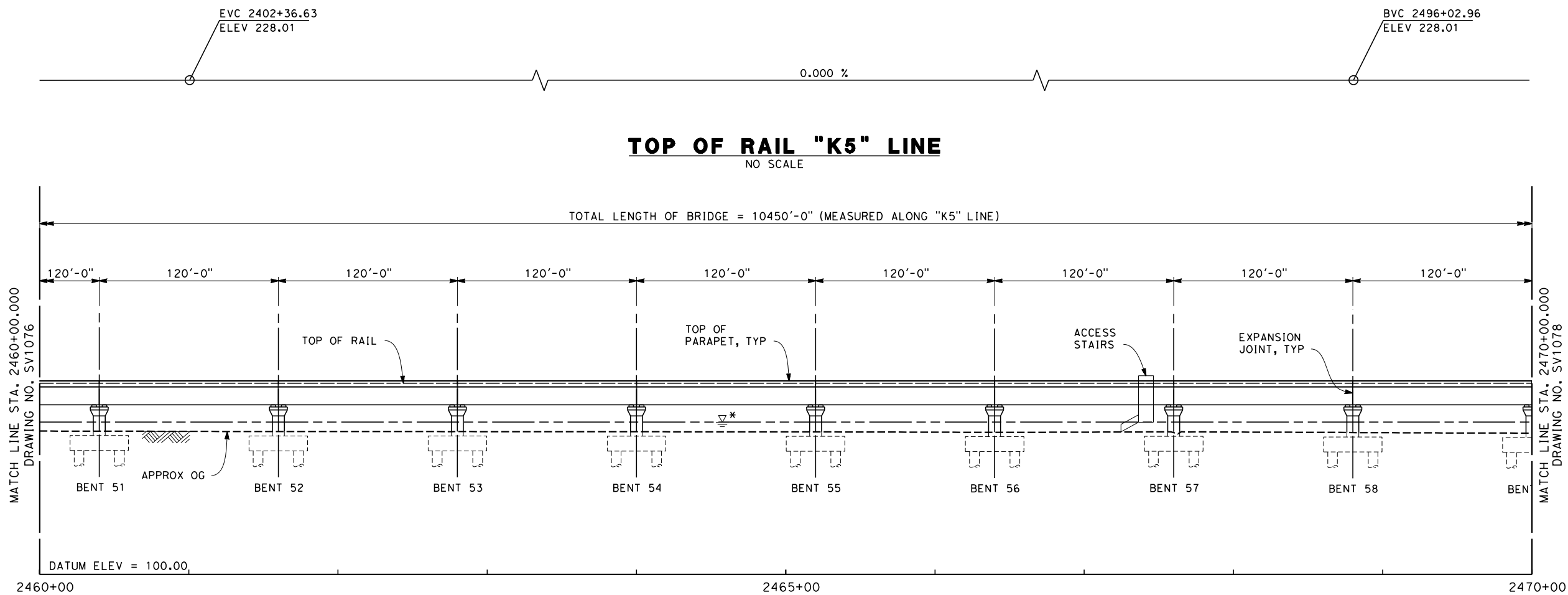
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

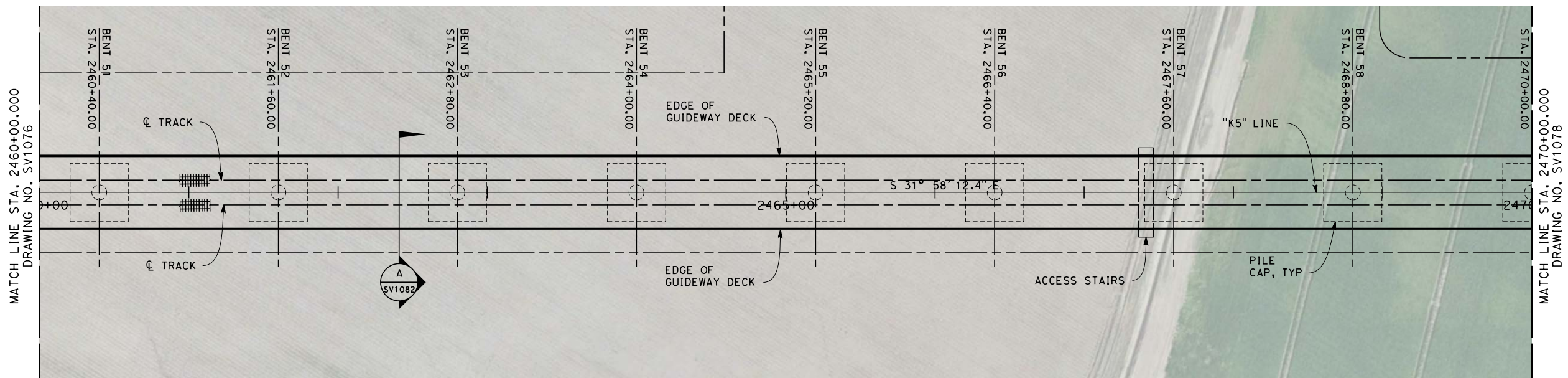
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1076
SCALE AS SHOWN
SHEET NO. 7 OF 14



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andrew.armstrong 2/12/2013 2:16:51 PM



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST  
IN-SITU  
STEEL TRUSS - INSITU, SLID  
OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND  
INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**

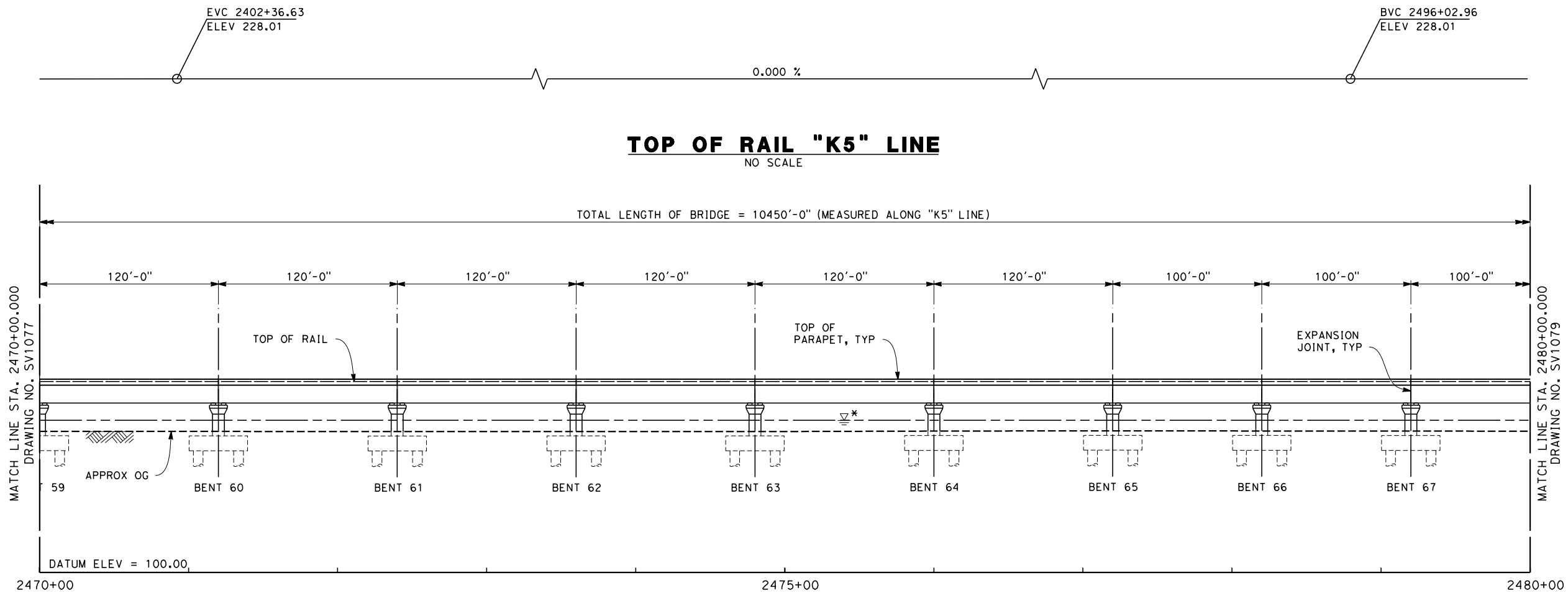


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

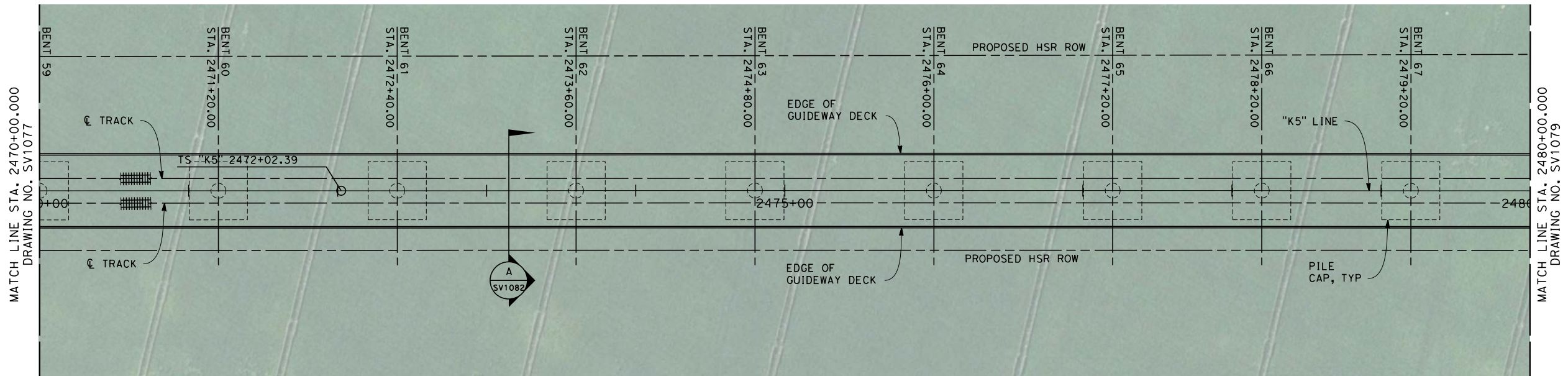
KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1077
SCALE AS SHOWN
SHEET NO. 8 OF 14

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**ELEVATION**  
SCALE 1" = 40'



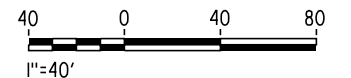
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



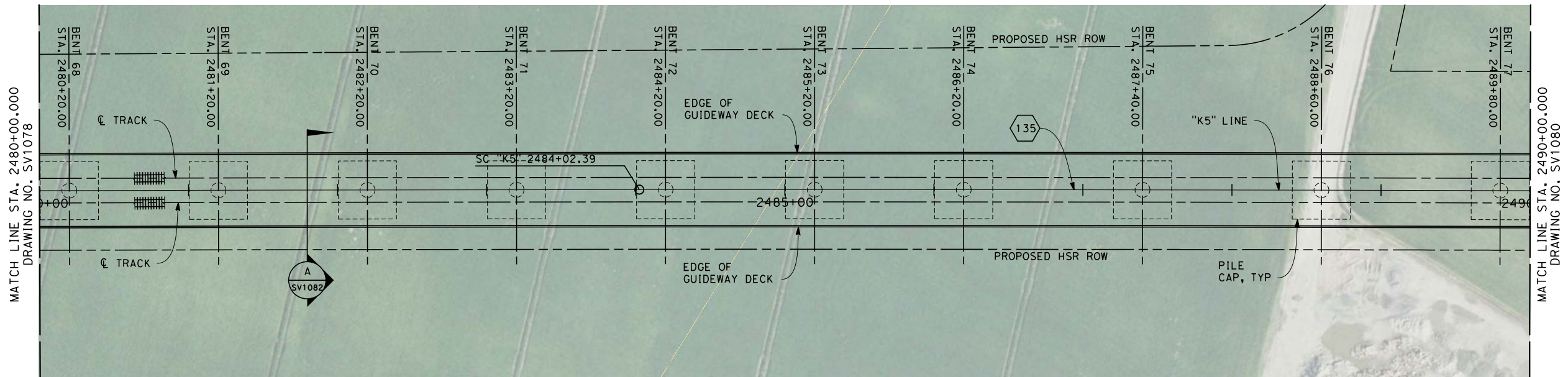
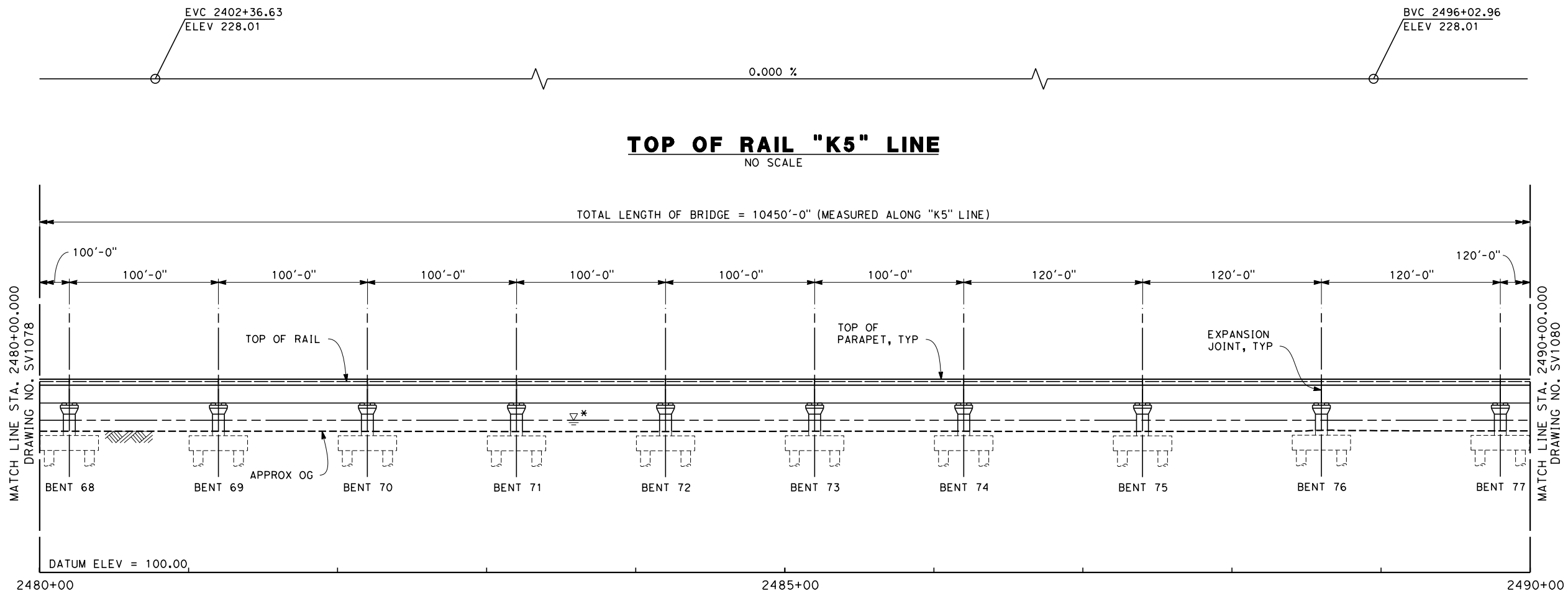
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1078
SCALE AS SHOWN
SHEET NO. 9 OF 14



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#### NOTES

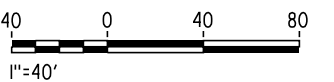
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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#### LEGEND:

- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

#### CURVE DATA

135  
R = 170000.00'  
Δ = 01° 14' 39.4"  
T = 1846.0'  
L = 3691.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



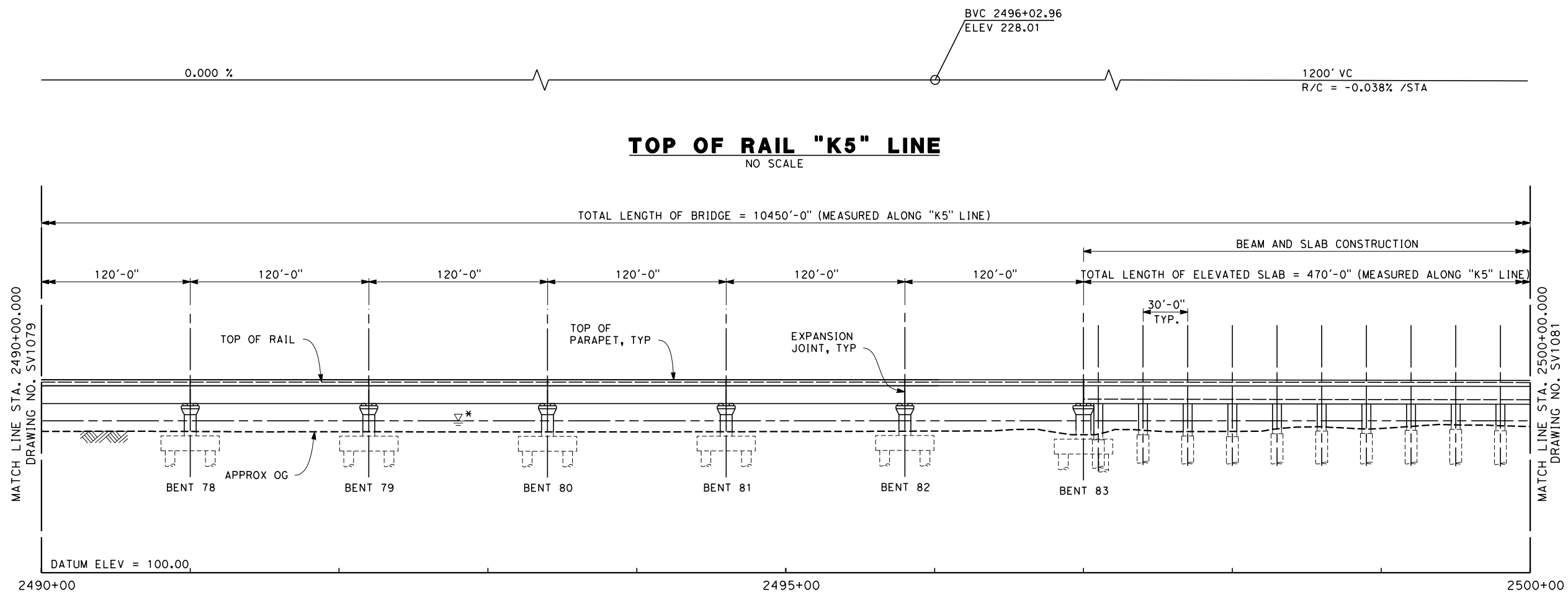
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

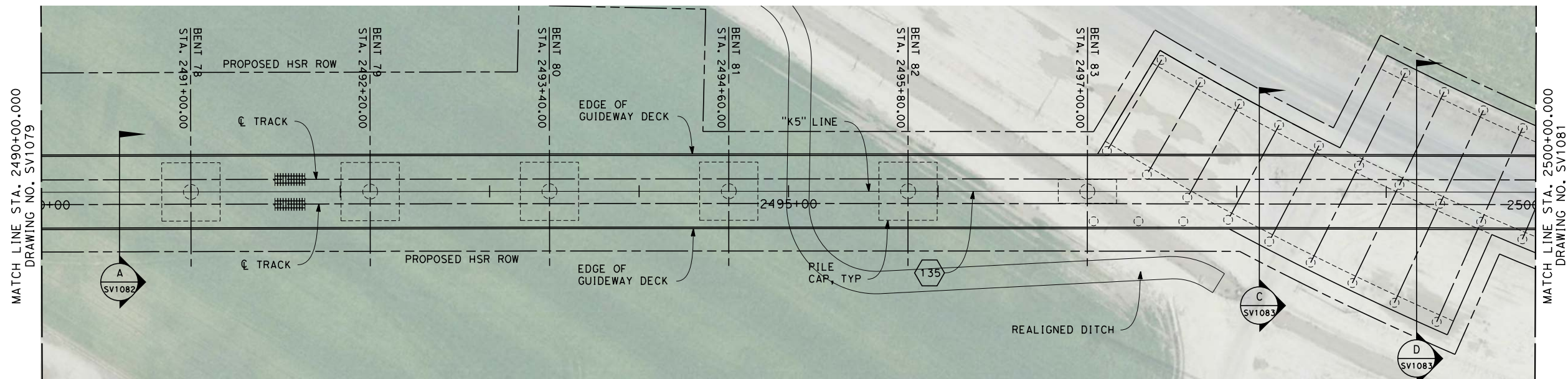
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1079
SCALE AS SHOWN
SHEET NO. 10 OF 14



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andrew.armstrong 2/12/2013 2:17:41 PM



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

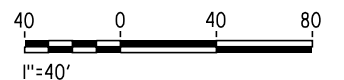
135

R = 170000.00'

$\Delta = 01^{\circ} 14' 39.4''$

T = 1846.0'

L = 3691.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**

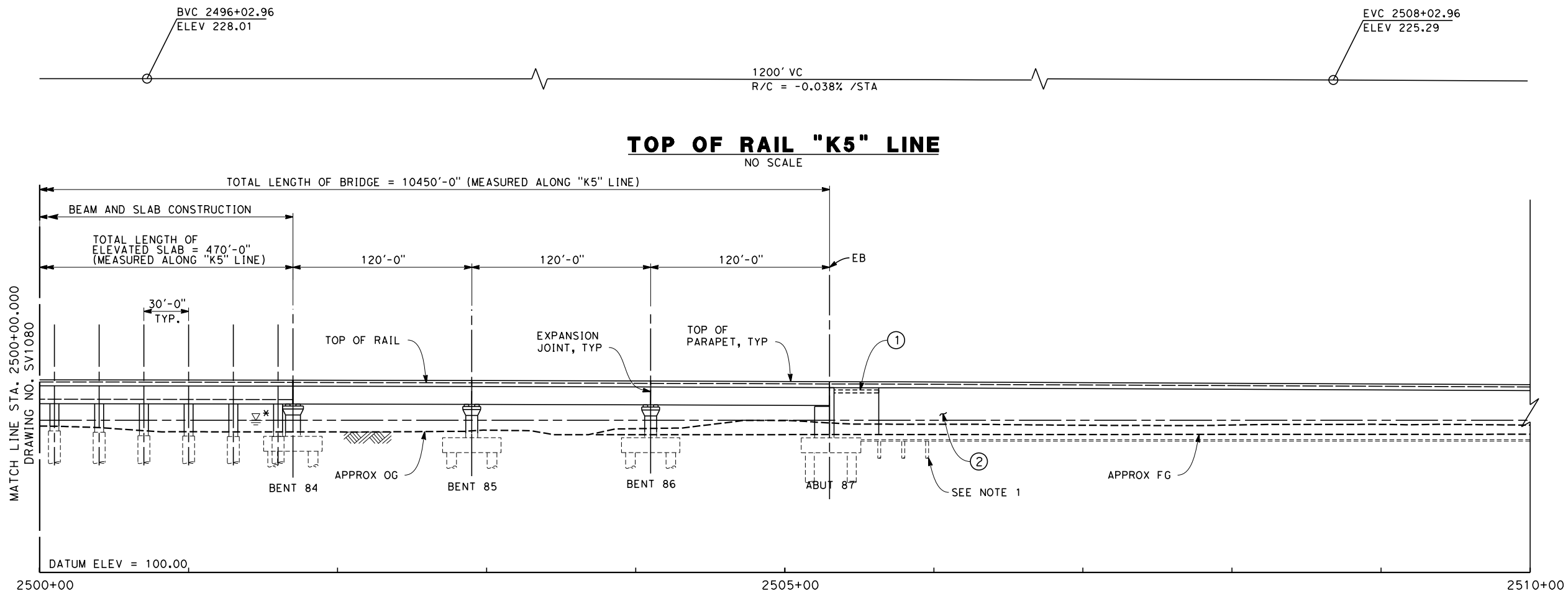


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

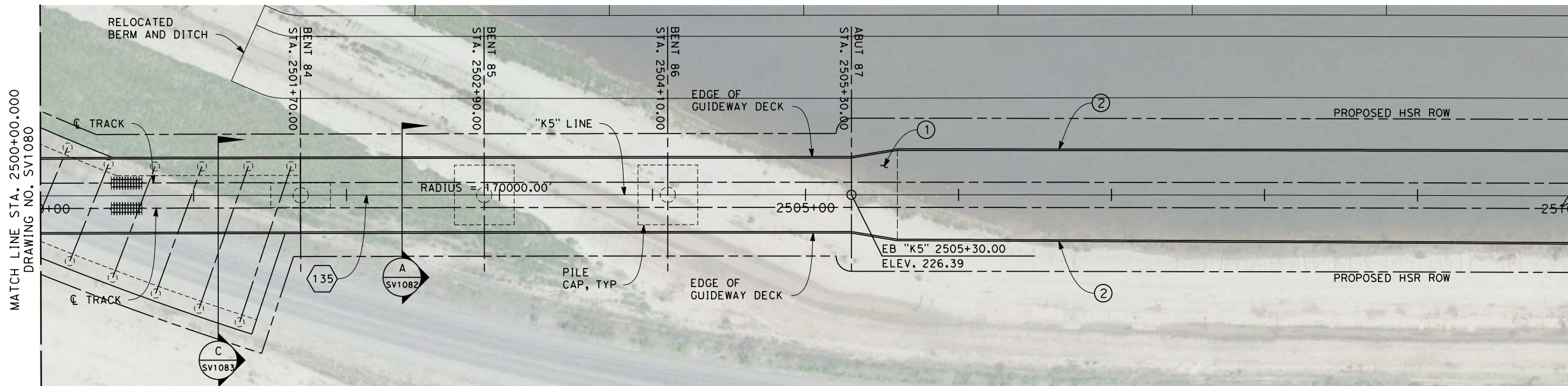
KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1080
SCALE AS SHOWN
SHEET NO. 11 OF 14

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12/23/2013 4:16:44 PM  
frank.palermo



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

**CURVE DATA**

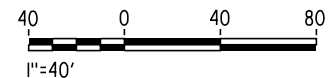
135

R = 170000.00'

Δ = 01° 14' 39.4"

T = 1846.0'

L = 3691.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



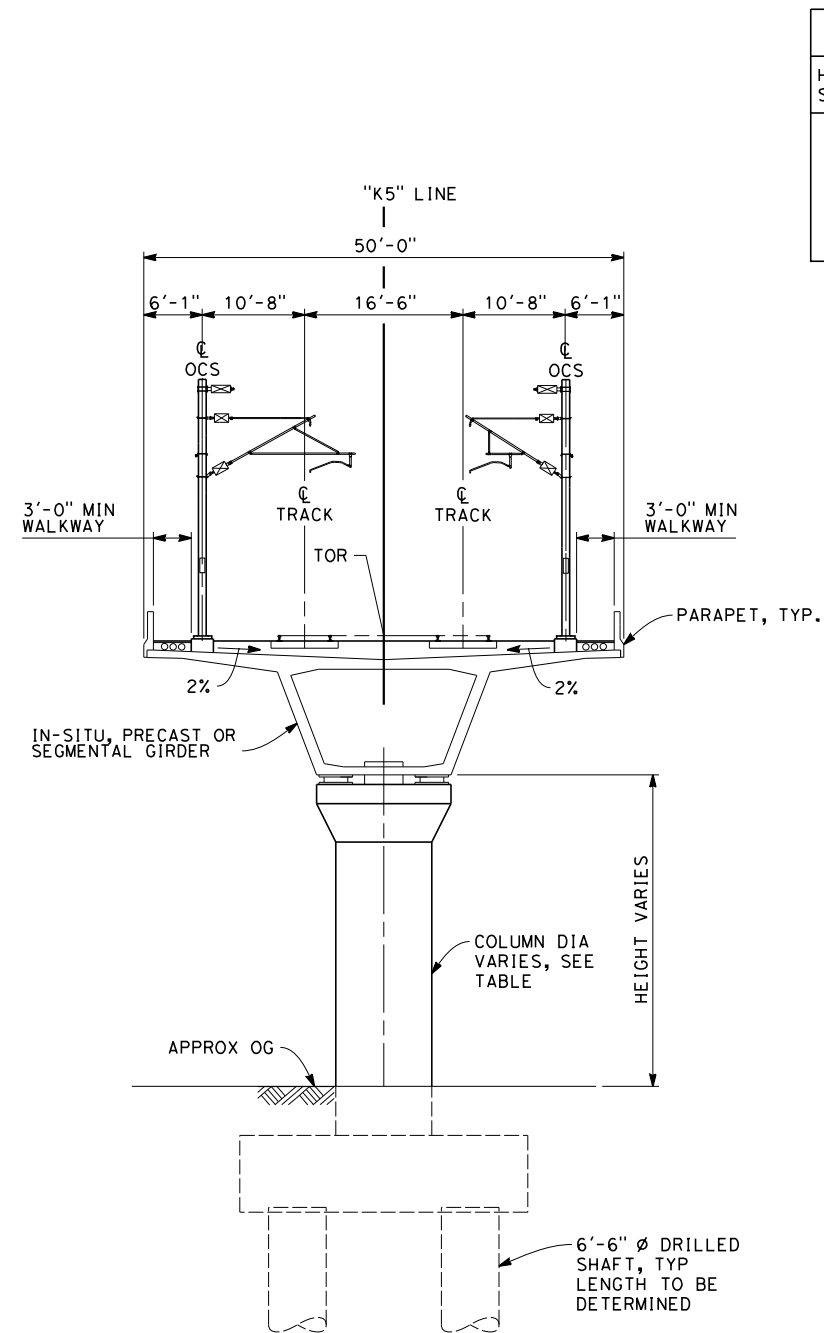
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
CROSS CREEK VIADUCT  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1081
SCALE AS SHOWN
SHEET NO. 12 OF 14



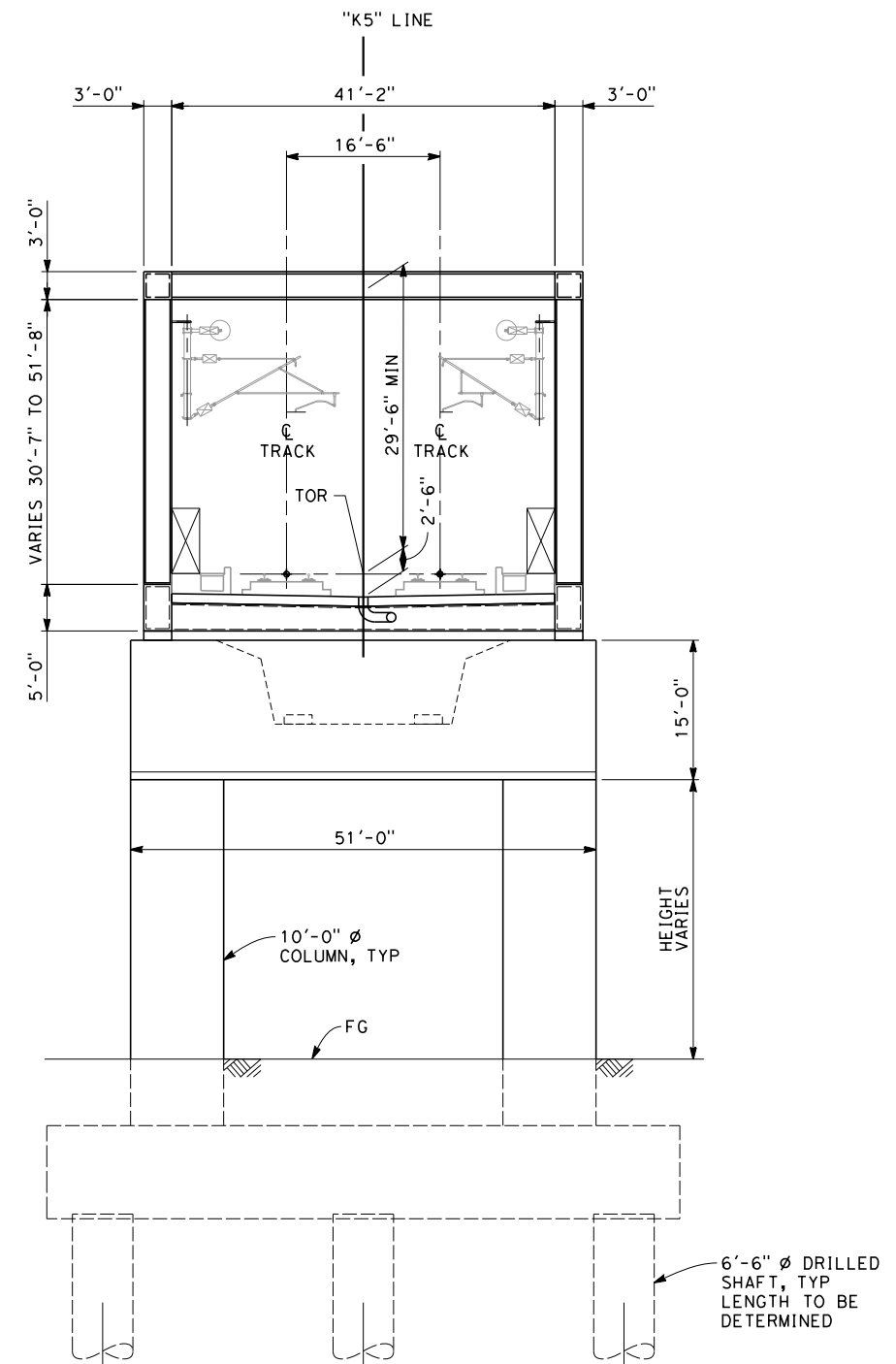
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andrew.armstrong 2/12/2013 2:18:02 PM



### SECTION A

SCALE: 1" = 10'

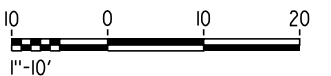
STA 2400+80 THROUGH 2449+62  
STA 2453+19 THROUGH 2497+00  
STA 2501+70 THROUGH 2505+30



### SECTION B

SCALE: 1" = 10'

STA 2449+62 THROUGH 2453+19



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

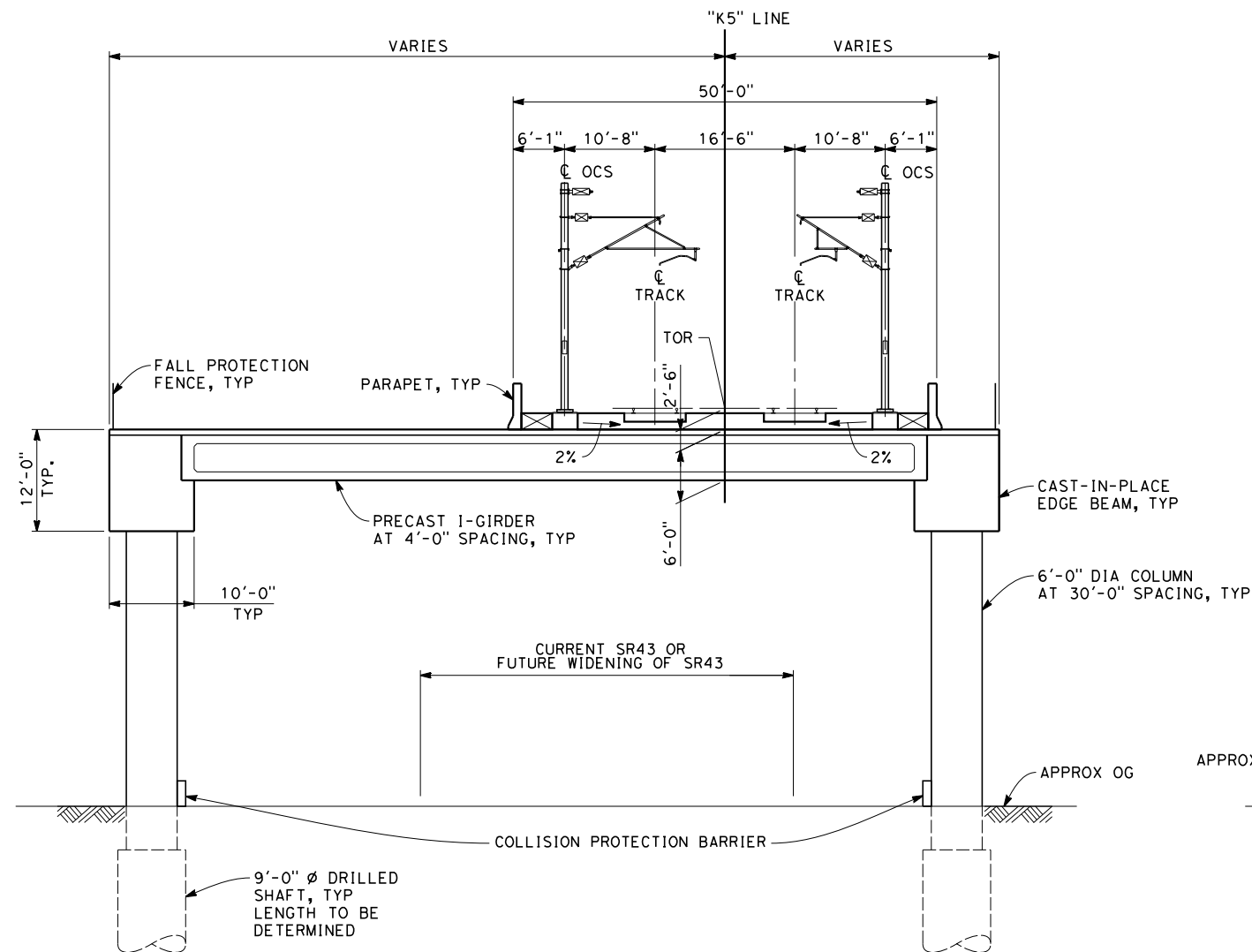
<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K5 CROSS CREEK VIADUCT TYPICAL SECTIONS

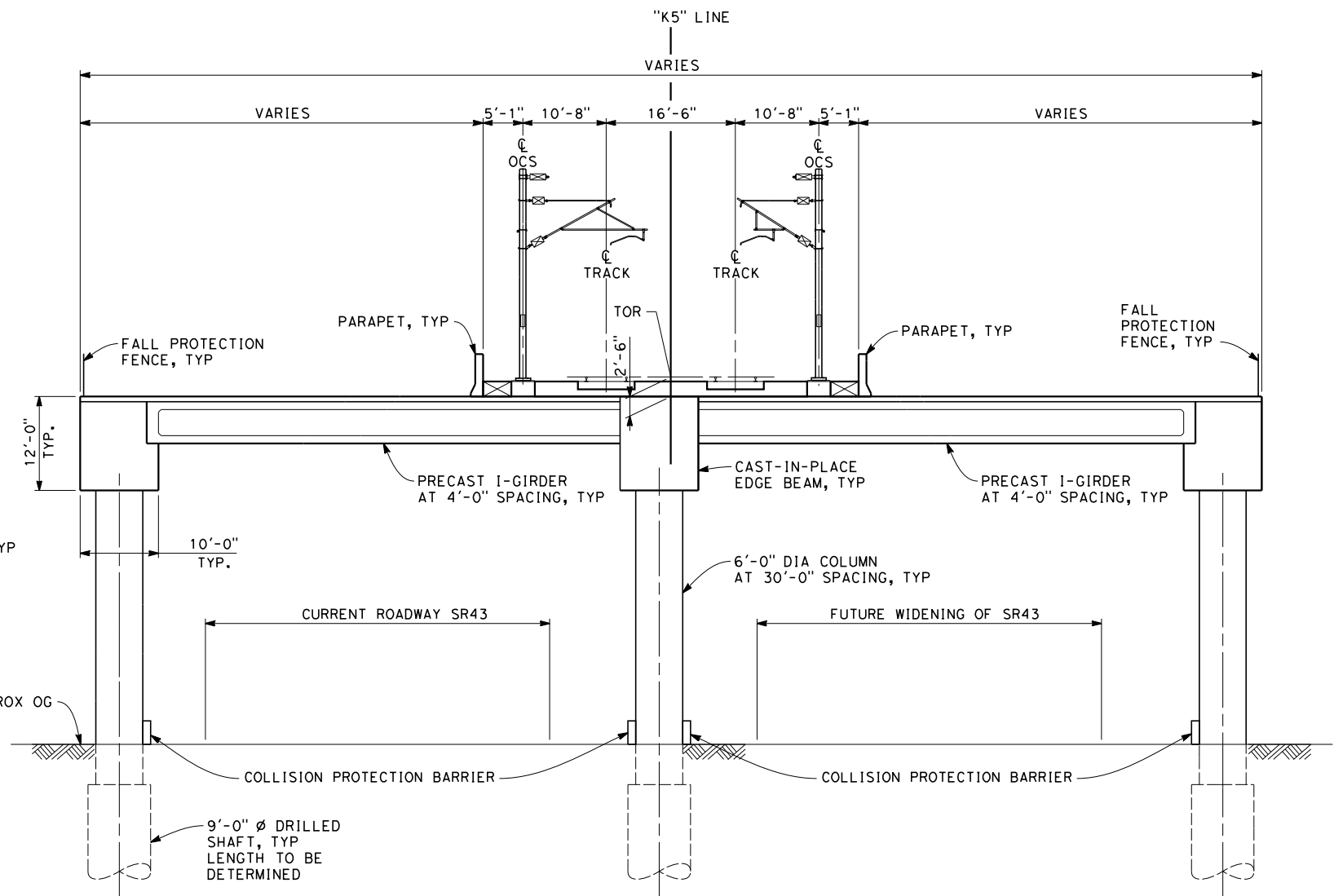
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1082
SCALE AS SHOWN
SHEET NO. 13 OF 14

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andrew.armstrong 2/12/2013 2:18:06 PM



**SECTION C**  
SCALE: 1" = 10'

STA 2497+00 THROUGH 2498+60 APPROX.  
STA 2499+70 THROUGH 2501+70 APPROX.



**SECTION D**  
SCALE: 1" = 10'

STA 2498+60 THROUGH 2499+70 APPROX.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K5 CROSS CREEK VIADUCT TYPICAL SECTIONS

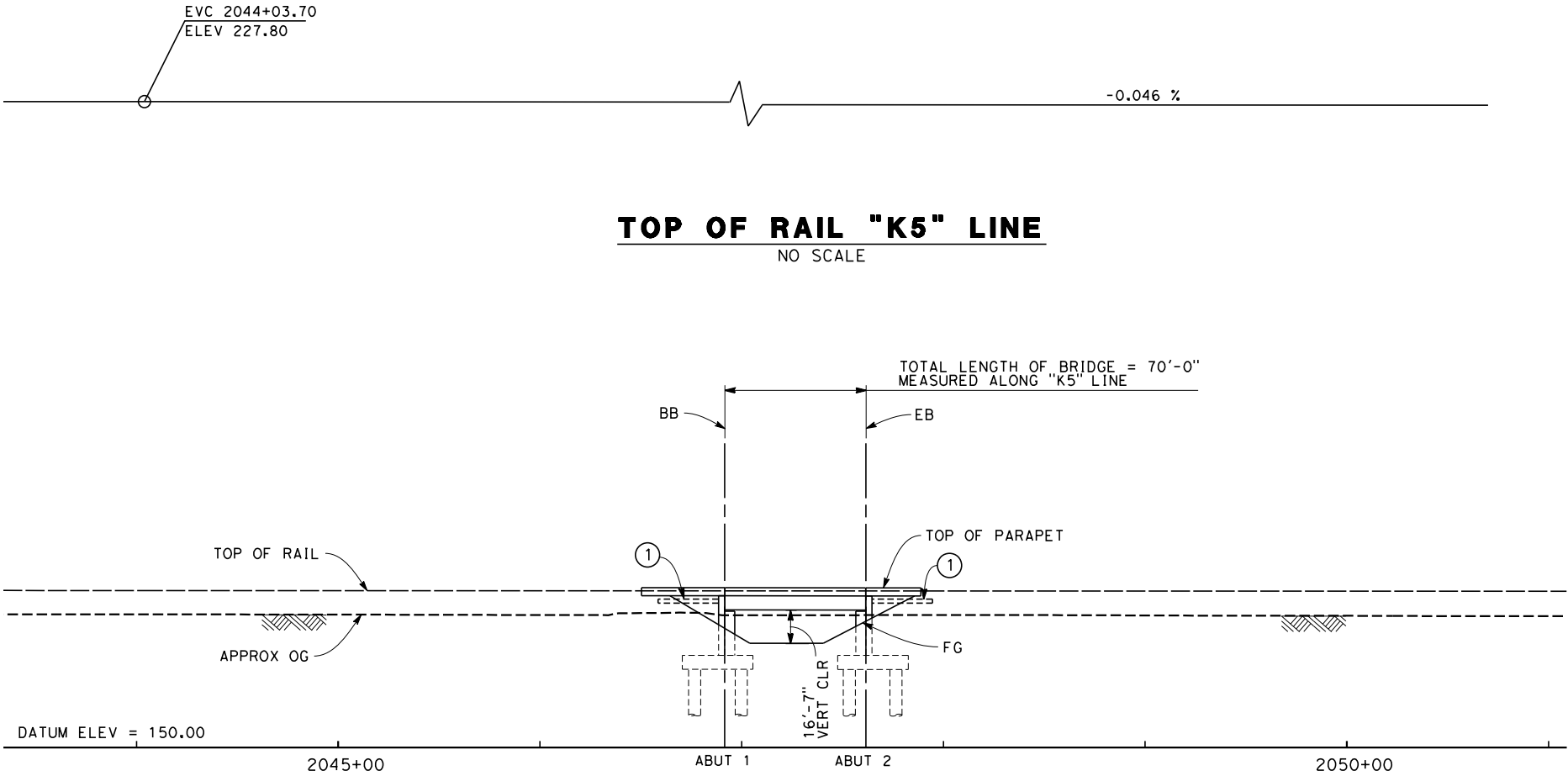
CONTRACT NO. HSR 06-0003
DRAWING NO. SV1083
SCALE AS SHOWN
SHEET NO. 14 OF 14



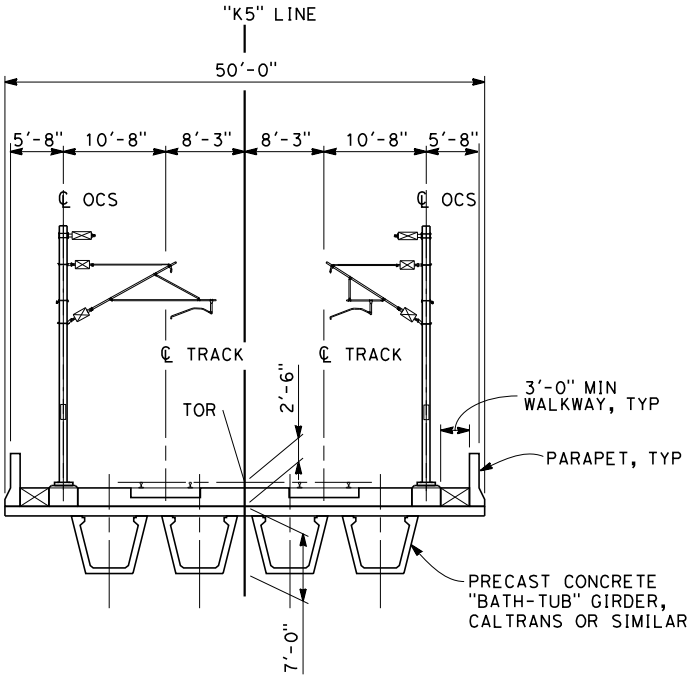
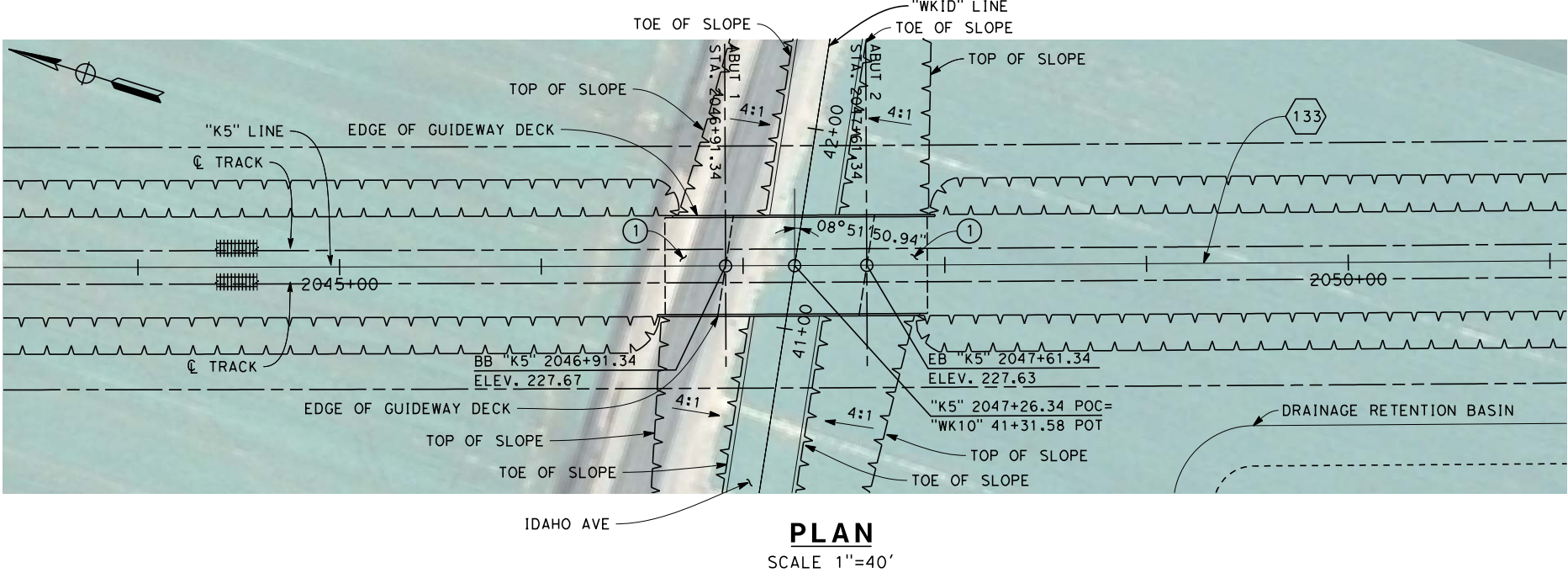
						DESIGNED BY M. FISHER	<b>RECORD SET 15% DESIGN SUBMISSION</b>  <b>NOT FOR CONSTRUCTION</b>	 	<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>  KAWEAH SUBSECTION ALIGNMENT K5 IDAHO AVE UNDERPASS KEY MAP	CONTRACT NO. HSR 06-0003
						DRAWN BY J. VALENZUELA				DRAWING NO. SV1150
						CHECKED BY A. ARMSTRONG				SCALE AS SHOWN
						IN CHARGE R. COFFIN				SHEET NO. 1 OF 2
						DATE 12/31/13				
REV	DATE	BY	CHK	APP	DESCRIPTION					



andrew.armstrong 2/12/2013 2:18:40 PM c:\pwworking\hmm\external\andrew.armstrong-arup.com\dms82479\FB-SV-1151-K5.dgn



**ELEVATION**  
SCALE 1"=40'



**TYPICAL SECTION**  
SCALE 1"=10'

- NOTES:
- PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
  - FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

- LEGEND:
- ① STRUCTURE APPROACH SLAB
  - INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK

CURVE DATA

133

R = 100000.00'  
Δ = 15° 08' 39.6"  
T = 13293.4'  
L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
M. FISHER

DRAWN BY  
J. VALENZUELA

CHECKED BY  
A. ARMSTRONG

IN CHARGE  
R. COFFIN

DATE  
12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
IDAHO AVE UNDERPASS  
PLAN AND ELEVATION

CONTRACT NO.  
HSR 06-0003

DRAWING NO.  
SV1151

SCALE  
AS SHOWN

SHEET NO.  
2 OF 2



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
M. FISHER  
DRAWN BY  
J. VALENZUELA  
CHECKED BY  
A. ARMSTRONG  
IN CHARGE  
R. COFFIN  
DATE  
12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**  
  
**NOT FOR  
CONSTRUCTION**

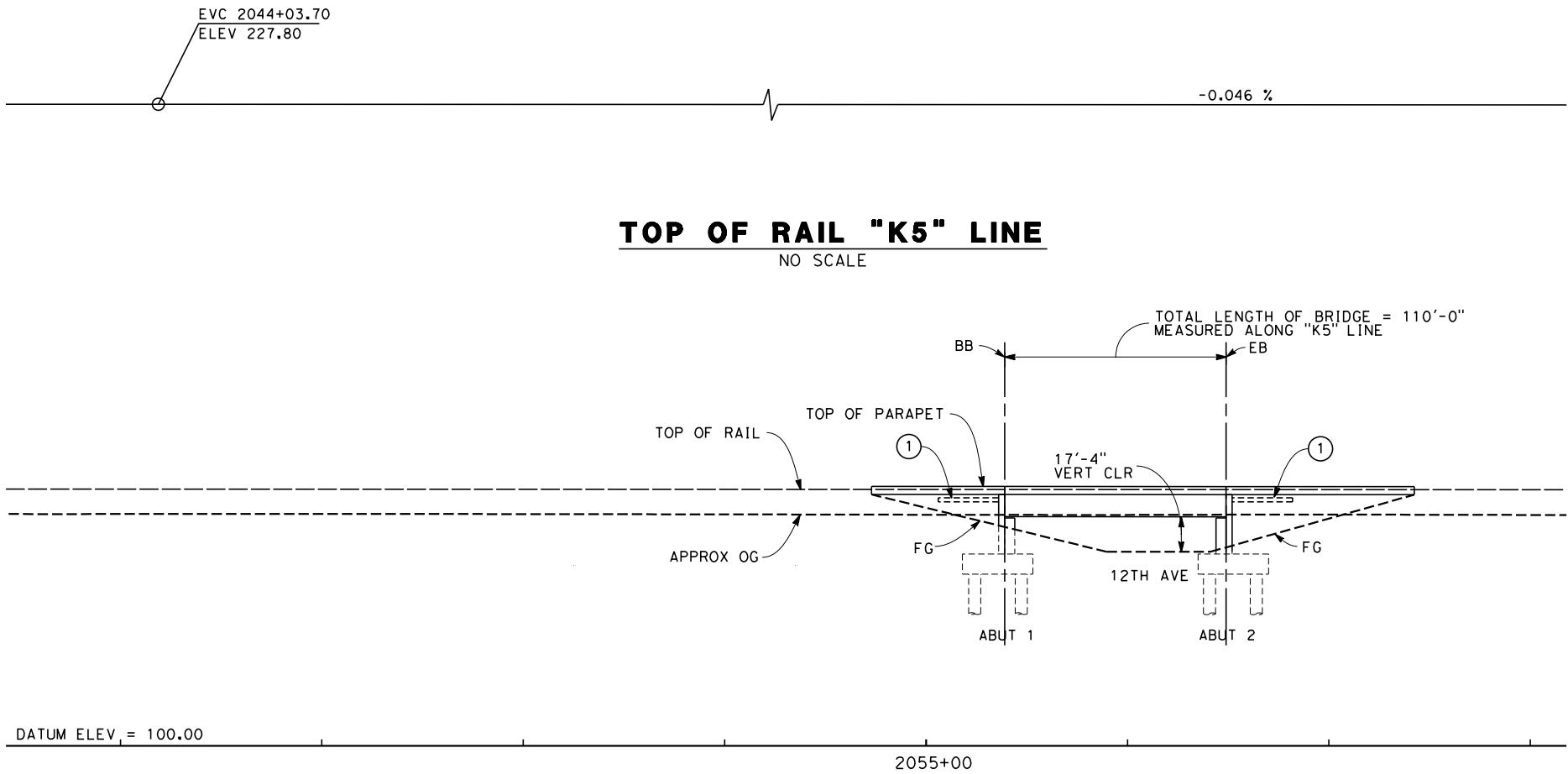


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**  
KAWEAH SUBSECTION  
ALIGNMENT K5  
12TH AVE UNDERPASS  
KEY MAP

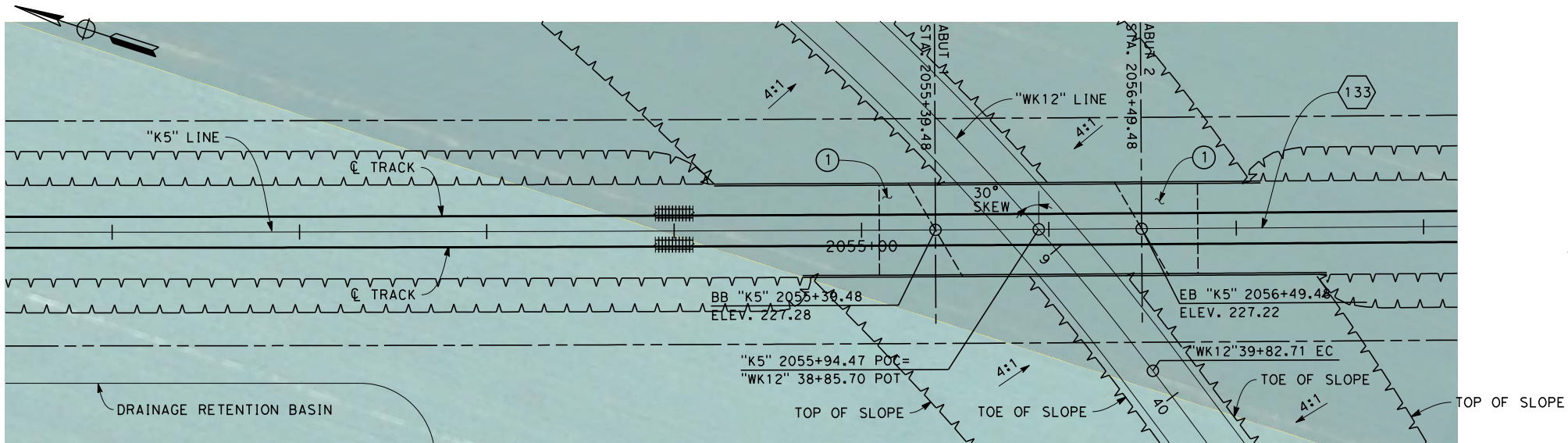
CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
SV1155  
SCALE  
AS SHOWN  
SHEET NO.  
1 OF 2



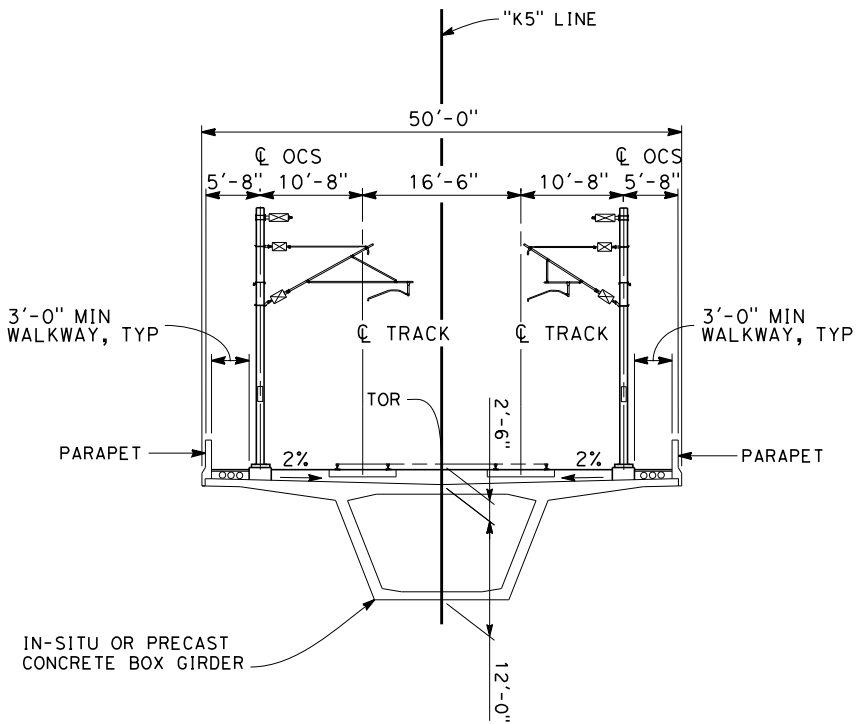
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andrew.armstrong 12/12/2013 2:19:20 PM



**ELEVATION**  
SCALE 1"=40'



**PLAN**  
SCALE: 1"=40'



**TYPICAL SECTION**  
SCALE 1"=10'

- NOTES:
- PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
  - FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

LEGEND:

① STRUCTURE APPROACH SLAB

INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK

CURVE DATA

133

R = 100000.00'

Δ = 15° 08' 39.6"

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K5 12TH AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1156
SCALE AS SHOWN
SHEET NO. 2 OF 2



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**LEGEND**

---+---+--- EXISTING FREIGHT RAILROAD

———— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. FISHER**

DRAWN BY  
**J. VALENZUELA**

CHECKED BY  
**A. ARMSTRONG**

IN CHARGE  
**R. COFFIN**

DATE  
**12/31/13**

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
11TH AVE UNDERPASS  
KEY MAP

CONTRACT NO.  
HSR 06-0003

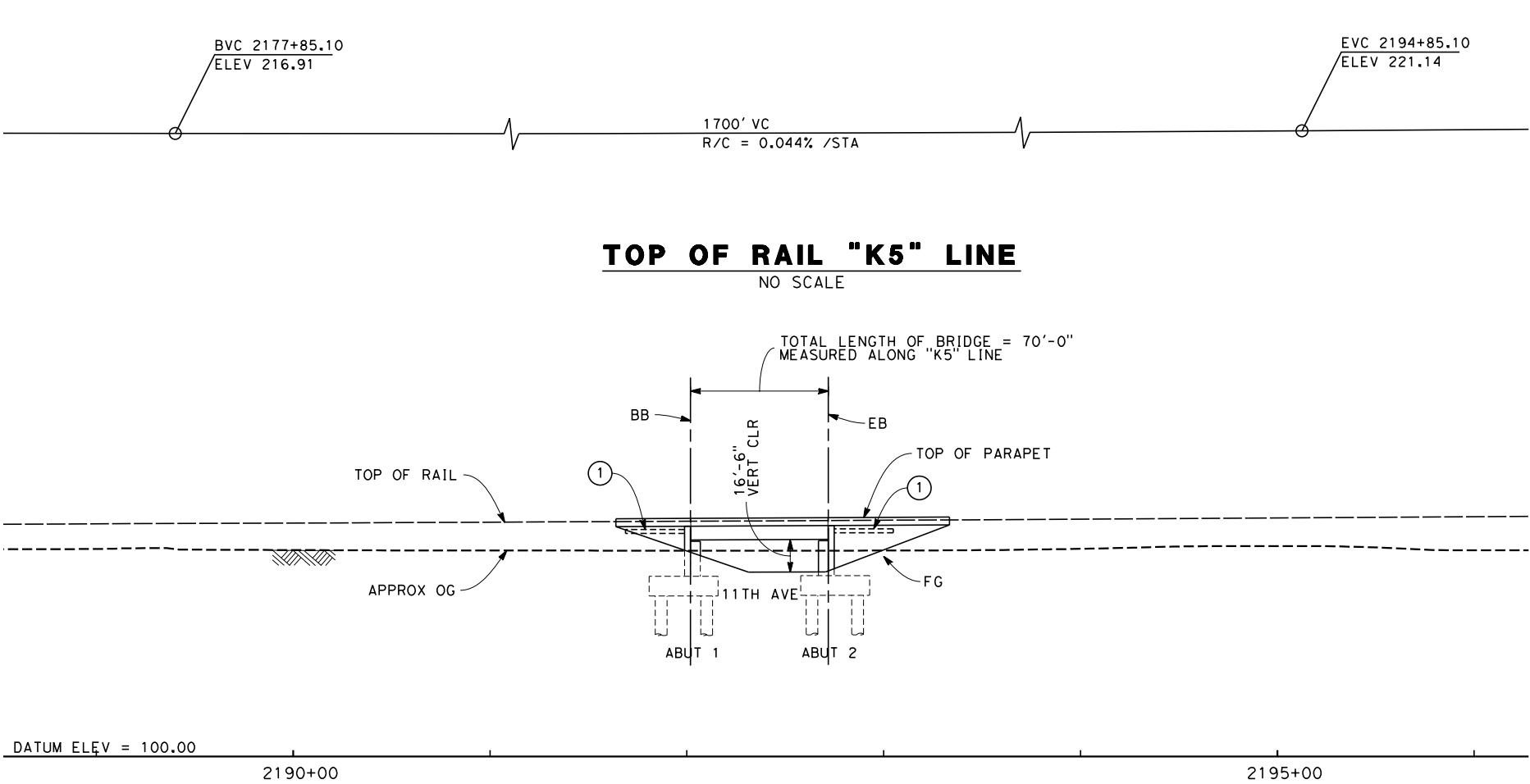
DRAWING NO.  
SV1160

SCALE  
AS SHOWN

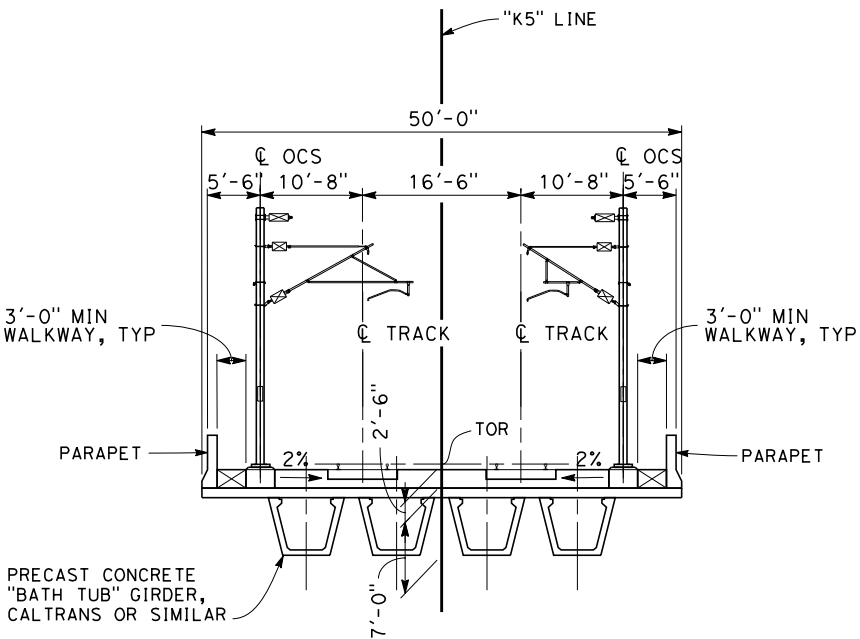
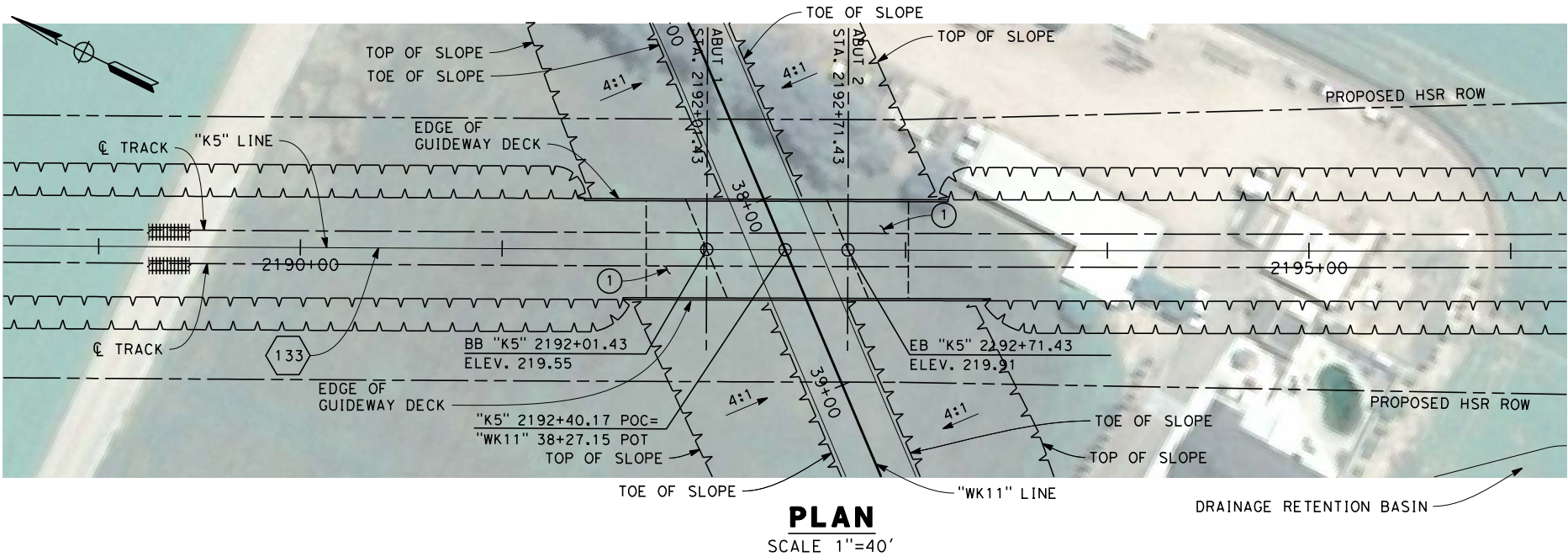
SHEET NO.  
1 OF 2



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**ELEVATION**  
SCALE 1"=40'



**TYPICAL SECTION**  
SCALE 1"=10'

- NOTES:
- PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
  - FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

- LEGEND:
- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK

CURVE DATA

133

R = 100000.00'

Δ = 15° 08' 39.6"

T = 13293.4'

L = 26431.8'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K5  
11TH AVENUE UNDERPASS  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1161
SCALE AS SHOWN
SHEET NO. 2 OF 2



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
M. FISHER  
DRAWN BY  
J. VALENZUELA  
CHECKED BY  
A. ARMSTRONG  
IN CHARGE  
R. COFFIN  
DATE  
12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**  
  
**NOT FOR  
CONSTRUCTION**

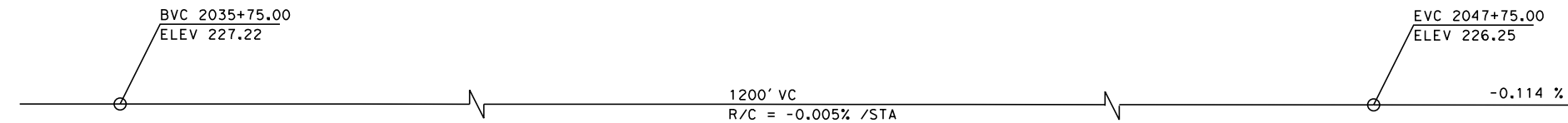


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**  
KAWEAH SUBSECTION  
ALIGNMENT K6  
IDAHO AVE UNDERPASS  
KEY MAP

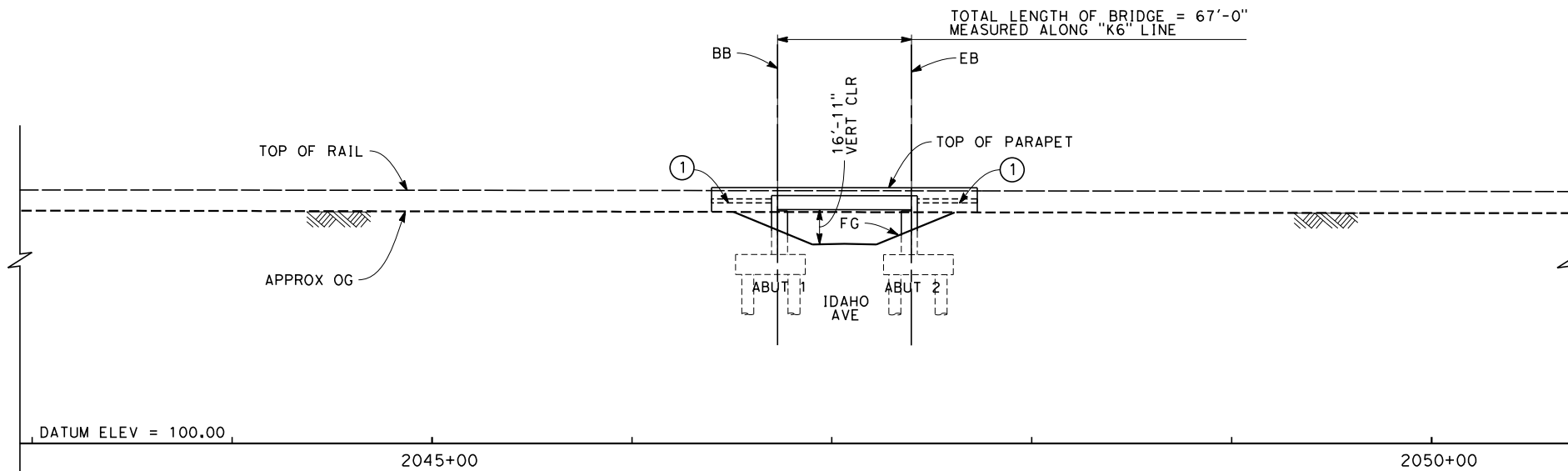
CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
SV1165  
SCALE  
AS SHOWN  
SHEET NO.  
1 OF 2



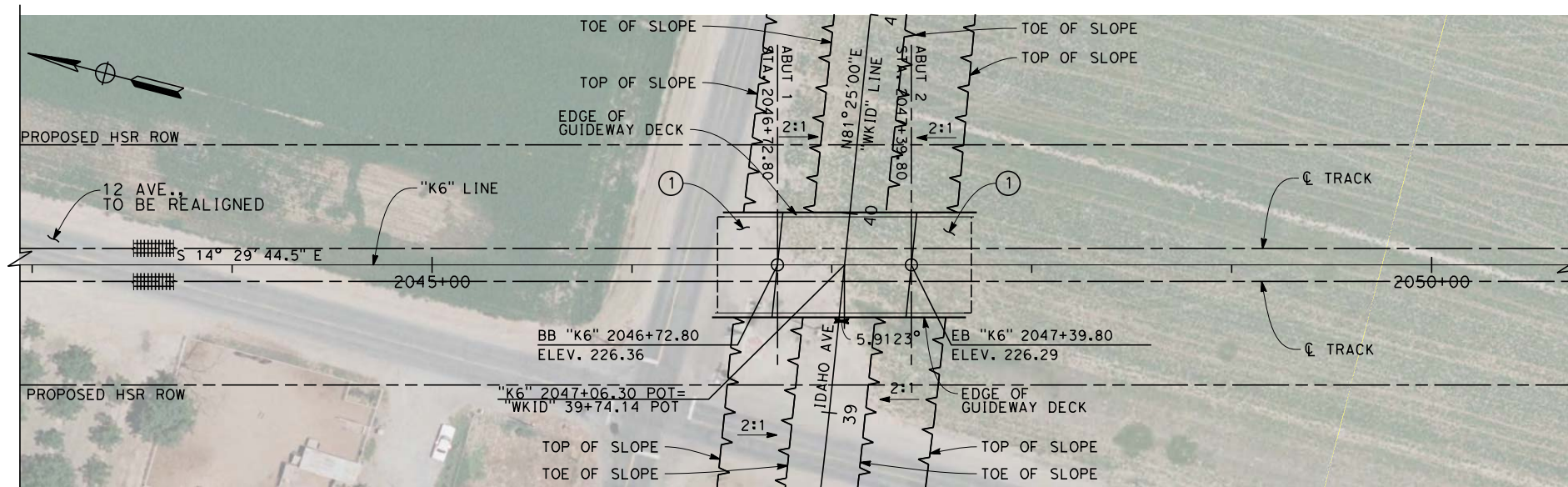
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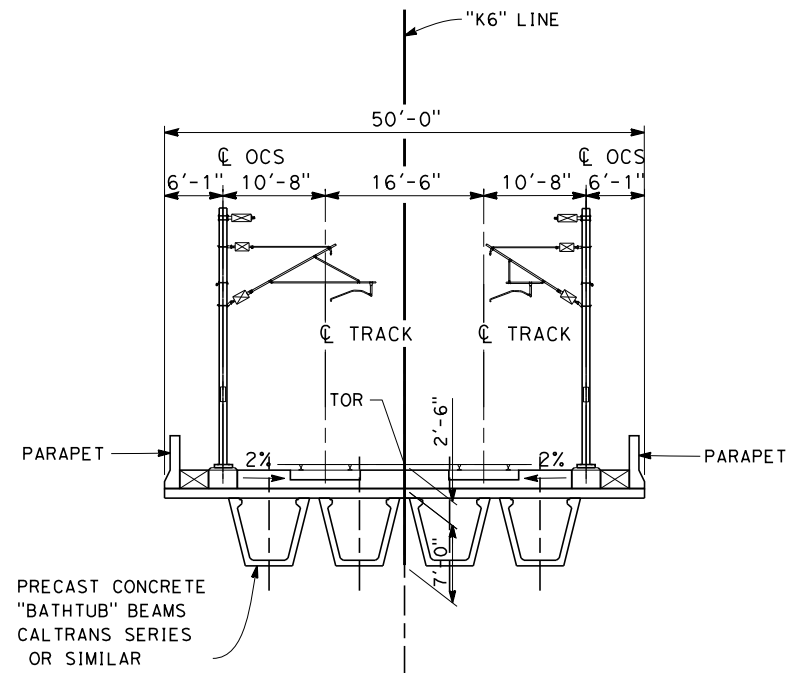
**TOP OF RAIL "K6" LINE**  
NO SCALE



**ELEVATION**  
SCALE: 1"=40'



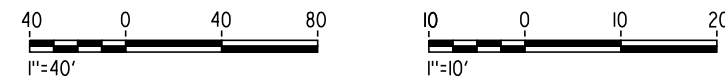
**PLAN**  
SCALE: 1"=40'



**TYPICAL SECTION**  
SCALE 1"=10'

- NOTES:
1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
  2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

- LEGEND:
- ① STRUCTURE APPROACH SLAB
  - INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
IDAHO AVE UNDERPASS  
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1166
SCALE AS SHOWN
SHEET NO. 2 OF 2



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
M. FISHER  
DRAWN BY  
J. VALENZUELA  
CHECKED BY  
A. ARMSTRONG  
IN CHARGE  
R. COFFIN  
DATE  
12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**  
  
**NOT FOR  
CONSTRUCTION**

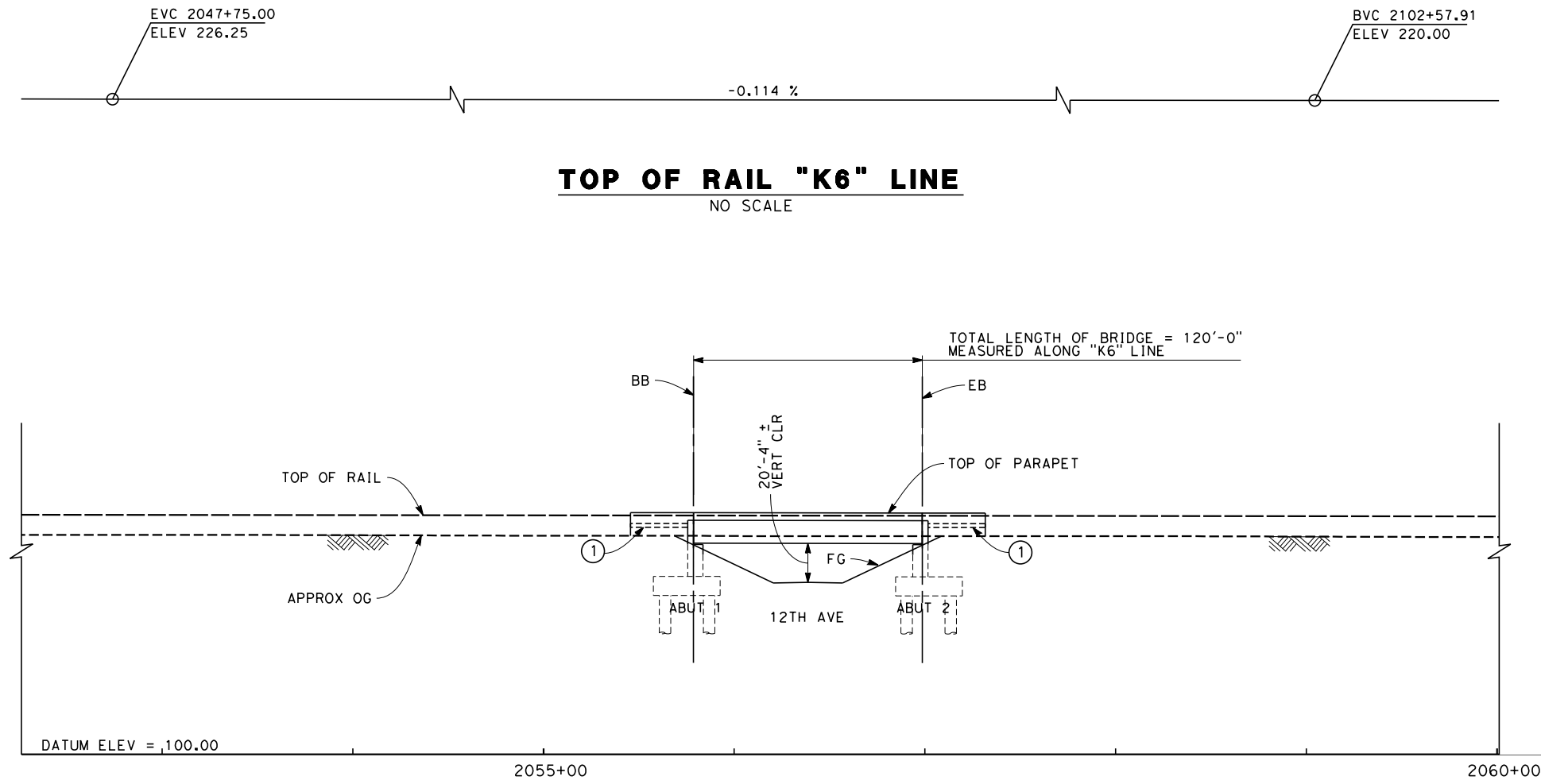


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**  
KAWEAH SUBSECTION  
ALIGNMENT K6  
12TH AVE UNDERPASS  
KEY MAP

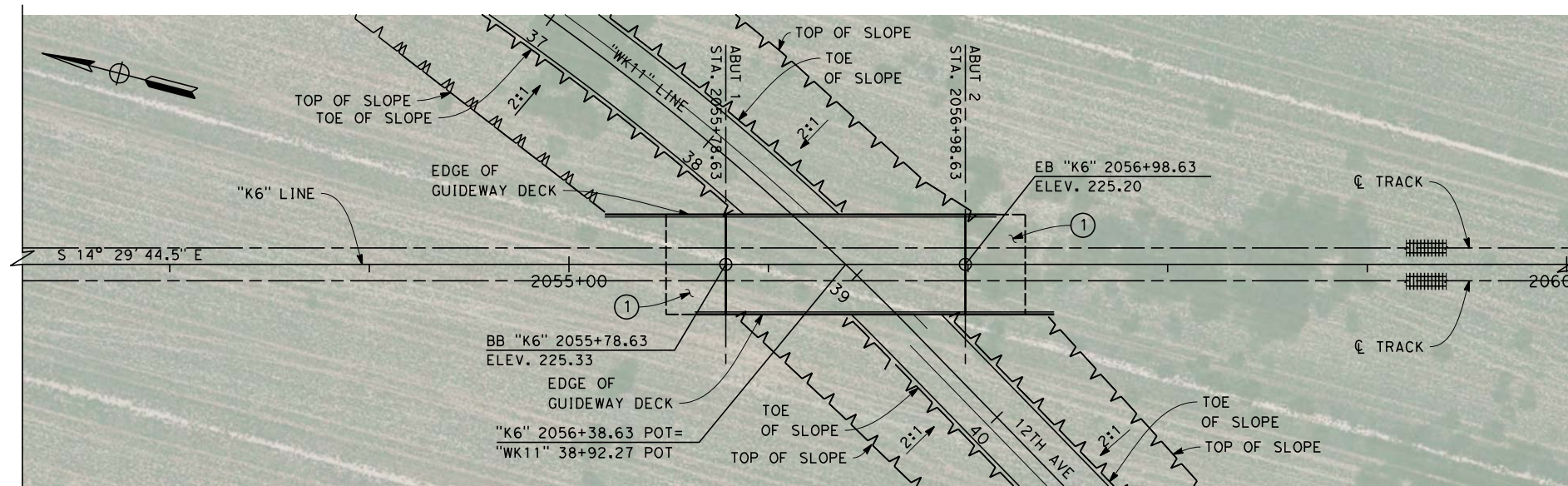
CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
SV1170  
SCALE  
AS SHOWN  
SHEET NO.  
1 OF 2



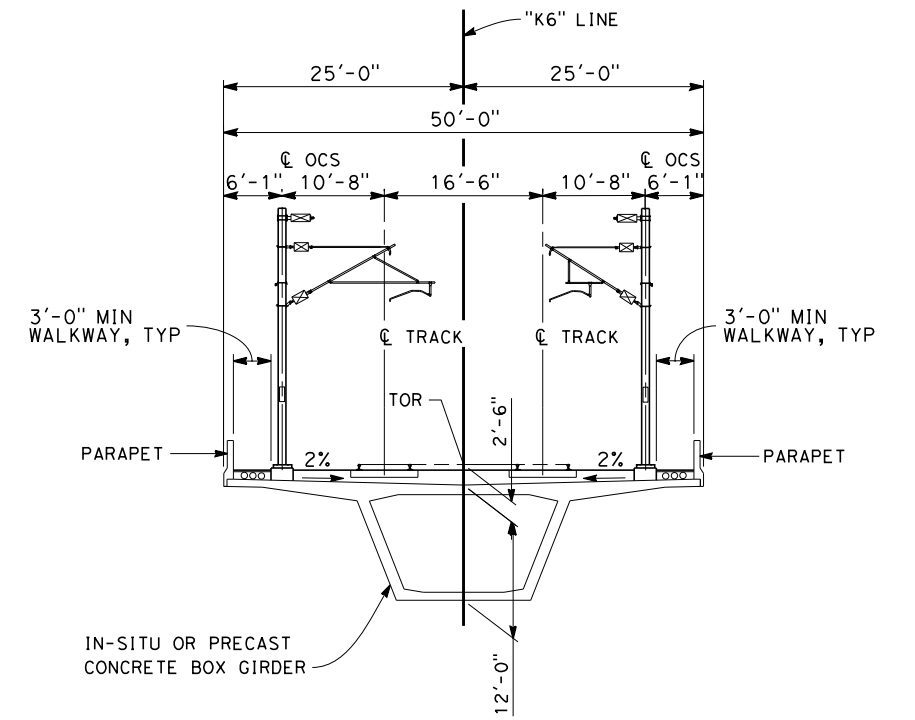
Nadine.Hutton 12/12/2013 11:08:23 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\dms82477\FB-SV-1171-K6.dgn



**ELEVATION**  
SCALE: 1"=40'



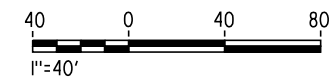
**PLAN**  
SCALE: 1"=40'



**TYPICAL SECTION**  
SCALE 1"=10'

- NOTES:
- PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
  - FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

- LEGEND:
- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K6 12TH AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1171
SCALE AS SHOWN
SHEET NO. 2 OF 2



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
M. FISHER  
DRAWN BY  
J. VALENZUELA  
CHECKED BY  
A. ARMSTRONG  
IN CHARGE  
R. COFFIN  
DATE  
12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**  
  
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**  
KAWEAH SUBSECTION  
ALIGNMENT K6  
KENT AVE UNDERPASS  
KEY MAP

CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
SV1175  
SCALE  
AS SHOWN  
SHEET NO.  
1 OF 2







DESIGNED BY <b>M. FISHER</b>
DRAWN BY <b>J. VALENZUELA</b>
CHECKED BY <b>A. ARMSTRONG</b>
IN CHARGE <b>R. COFFIN</b>
DATE <b>12/31/13</b>

URS | HMM | ARUP

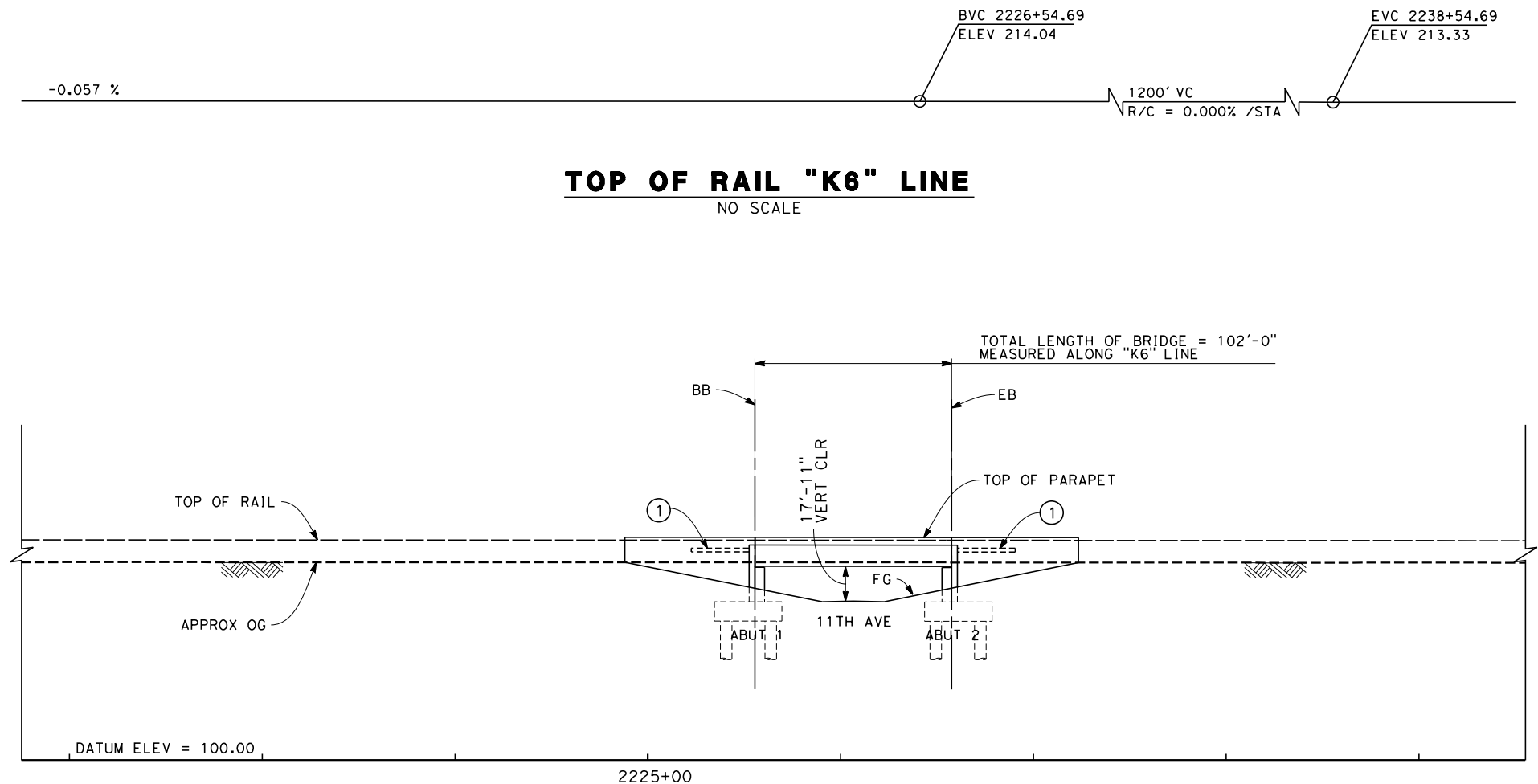
CALIFORNIA HIGH-SPEED TRAIN



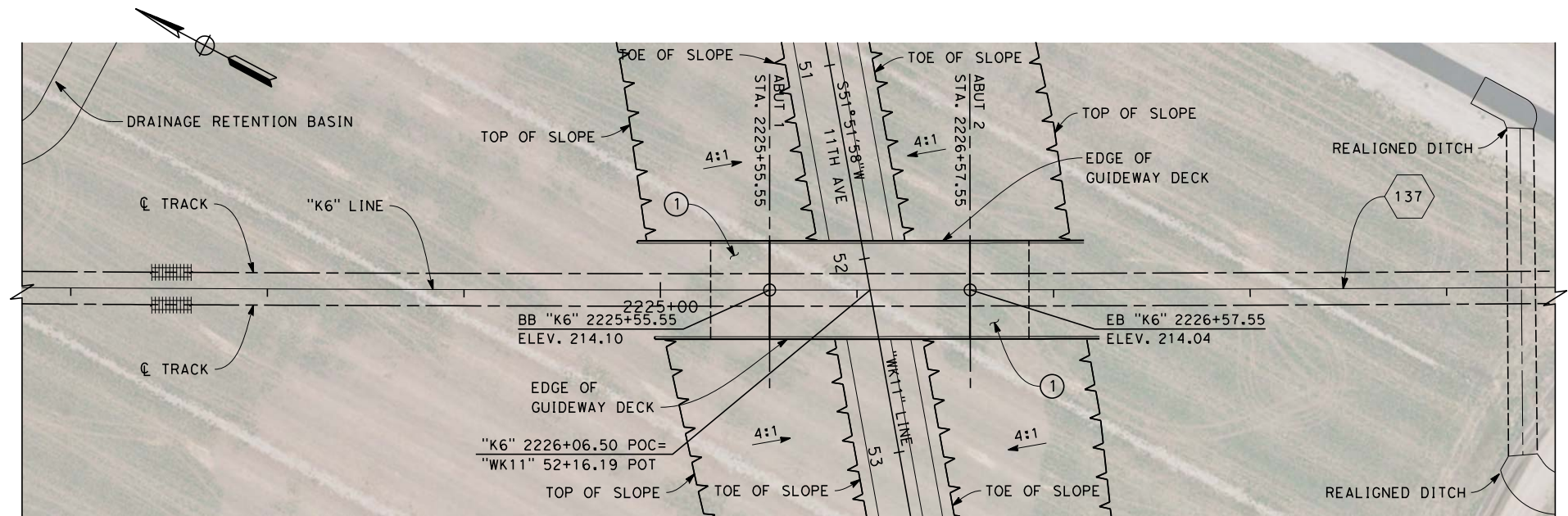
CONTRACT NO.	HSR 06-0003
DRAWING NO.	SV1180
SCALE	AS SHOWN
SHEET NO.	1 OF 2



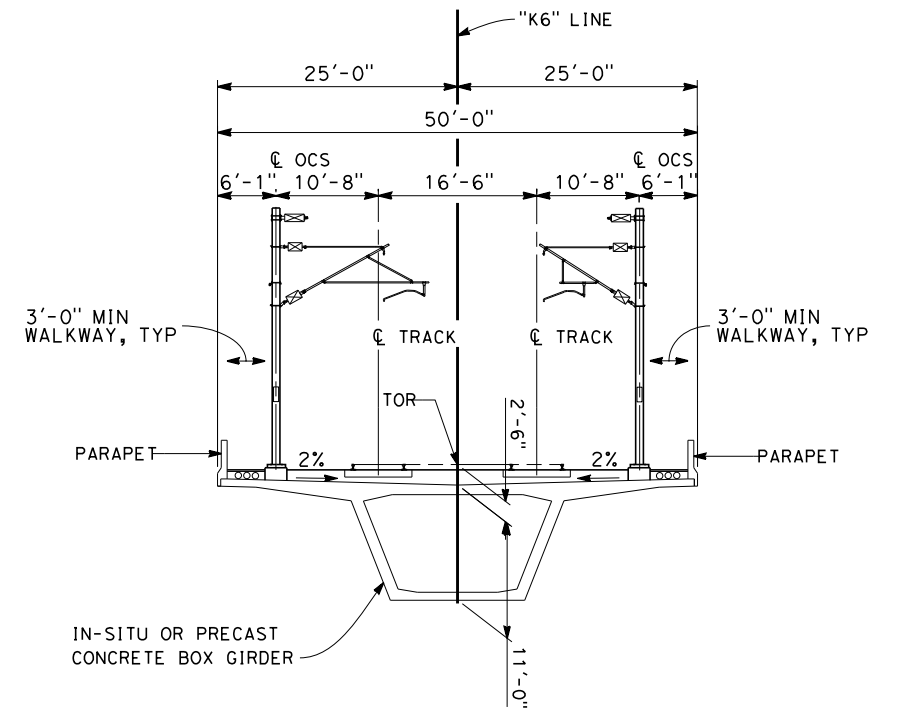
Nadine.Hutton 12/12/2013 11:09:56 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\dms82477\FB-SV-1181-K6.dgn



**ELEVATION**  
SCALE: 1"=40'



**PLAN**  
SCALE: 1"=40'



**TYPICAL SECTION**  
SCALE 1"=10'

**NOTES:**

1. PILE LENGTH TO BE DETERMINED/NOT ALL PILES SHOWN.
2. FOR MINIMUM VERTICAL CLEARANCES, SEE ALIGNMENT DRAWINGS.

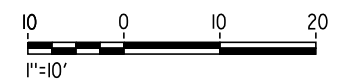
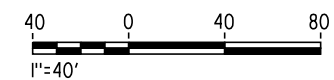
**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK

**CURVE DATA**

137

R = 60000.00'  
Δ = 19° 28' 23.2"  
T = 10295.4'  
L = 20392.2'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13



<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K6 11TH AVE UNDERPASS PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV1181
SCALE AS SHOWN
SHEET NO. 2 OF 2



						DESIGNED BY M. FISHER	<b>RECORD SET 15% DESIGN SUBMISSION</b>  <b>NOT FOR CONSTRUCTION</b>	 	<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>  KAWEAH SUBSECTION ALIGNMENT K6 KANSAS AVE UNDERPASS KEY MAP	CONTRACT NO. HSR 06-0003
						DRAWN BY J. VALENZUELA				DRAWING NO. SV1185
						CHECKED BY A. ARMSTRONG				SCALE AS SHOWN
						IN CHARGE R. COFFIN				SHEET NO. 1 OF 2
						DATE 12/31/13				
REV	DATE	BY	CHK	APP	DESCRIPTION					







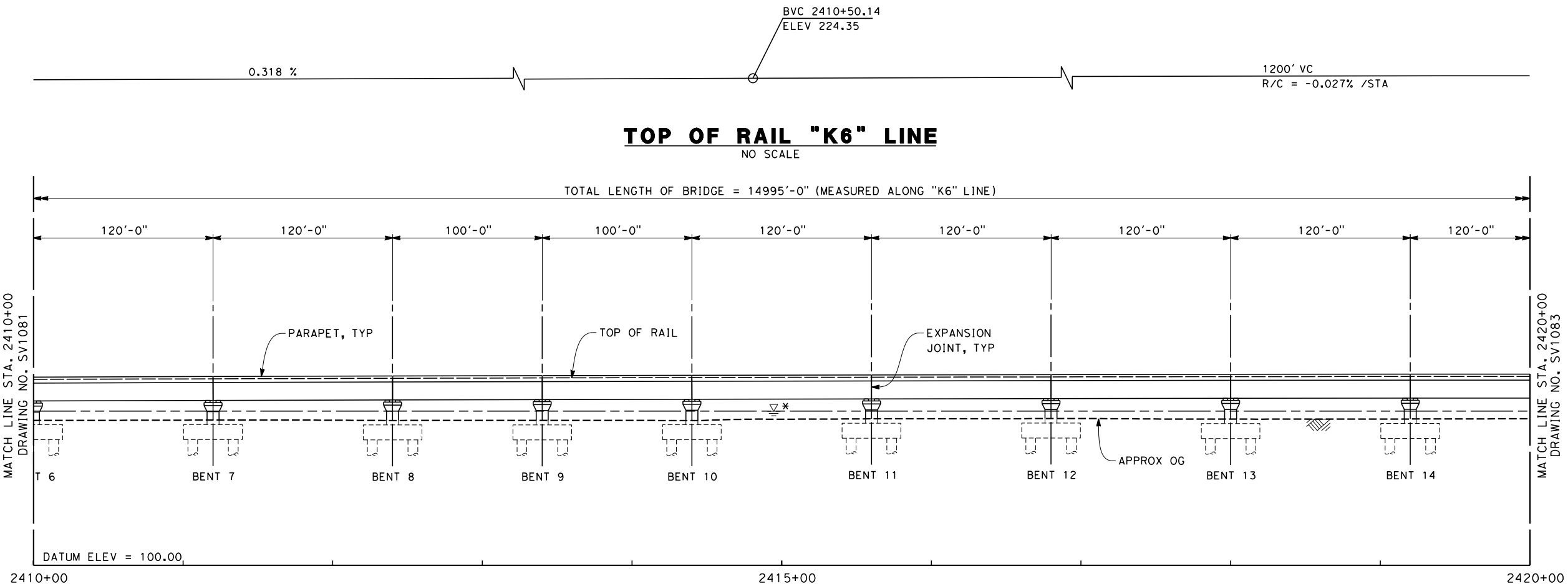




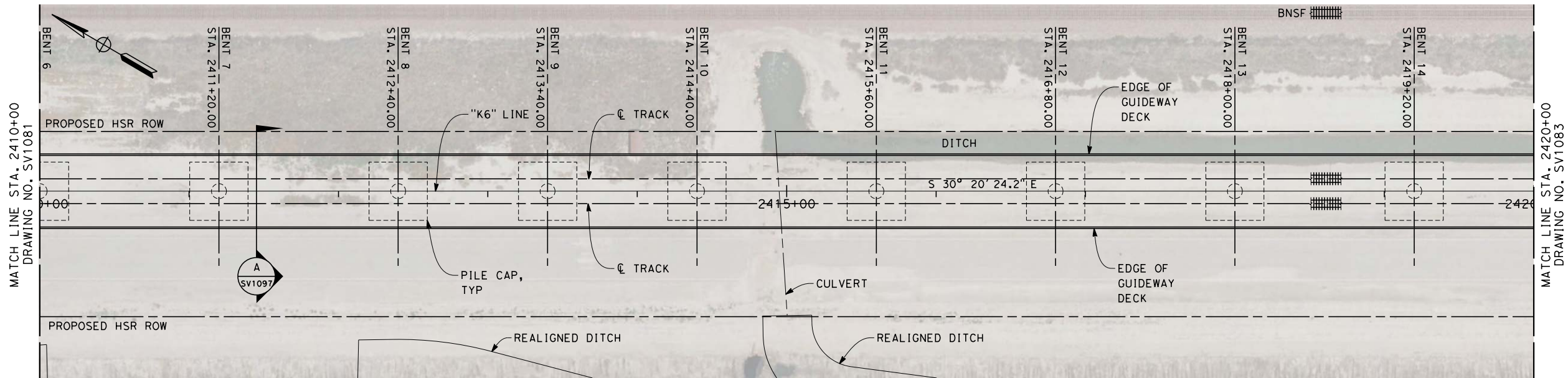




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**ELEVATION**  
SCALE 1" = 40'



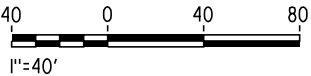
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



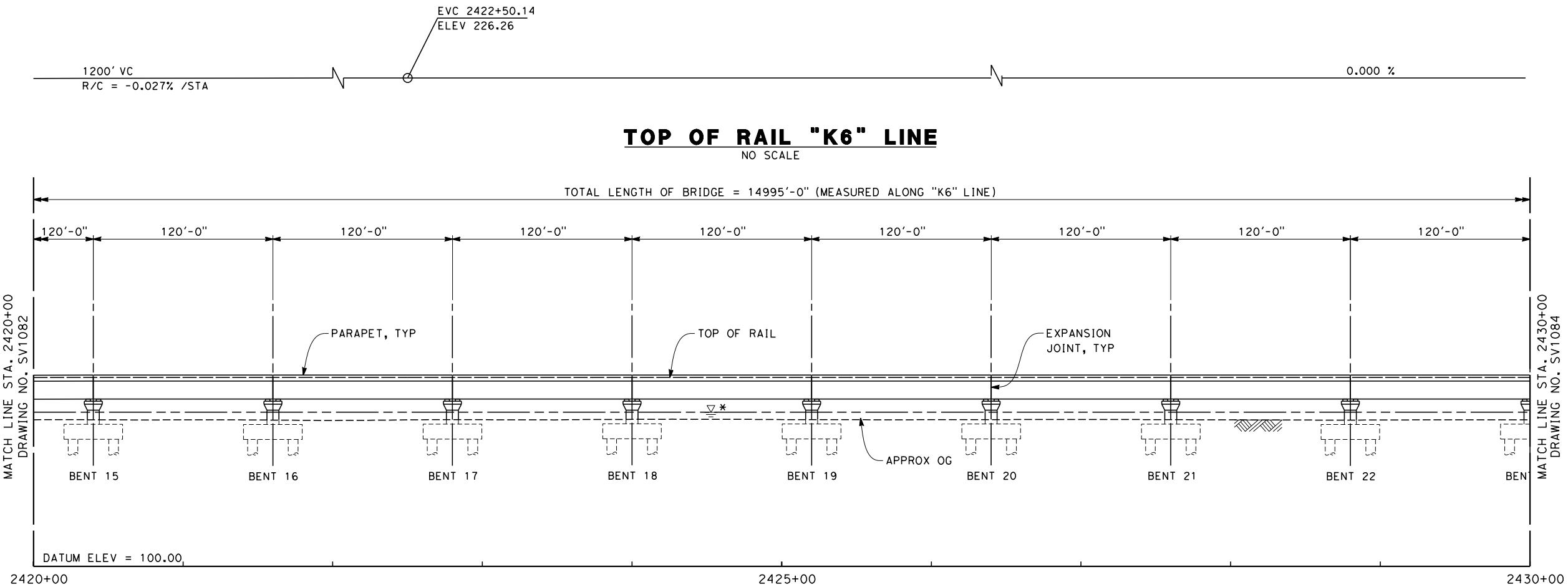
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

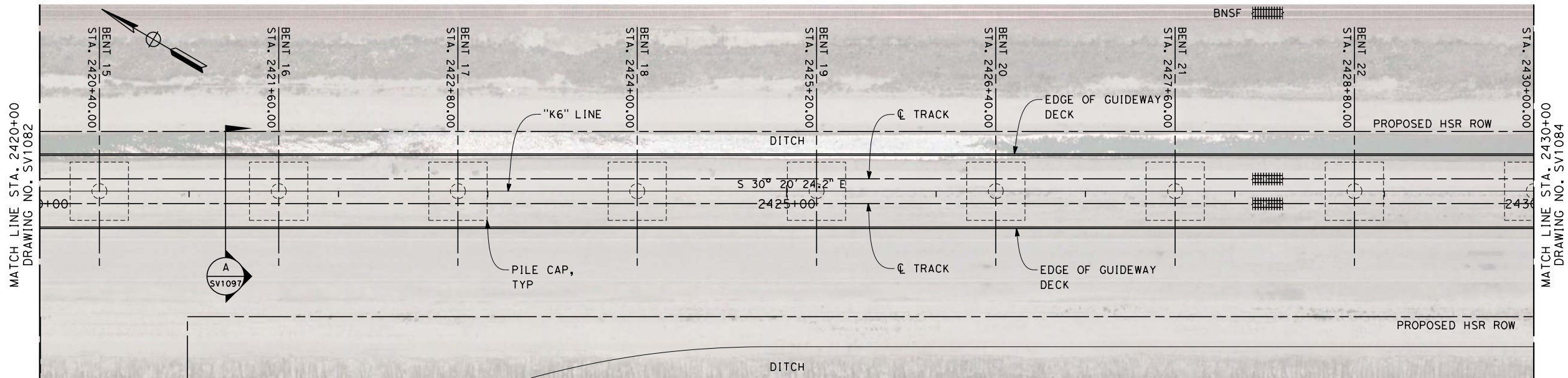
CONTRACT NO. HSR06-0003
DRAWING NO. SV1082
SCALE AS SHOWN
SHEET NO. 3 OF 18



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andrew.armstrong 2/12/2013 2:35:34 PM



**ELEVATION**  
SCALE 1" = 40'



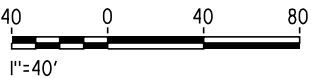
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



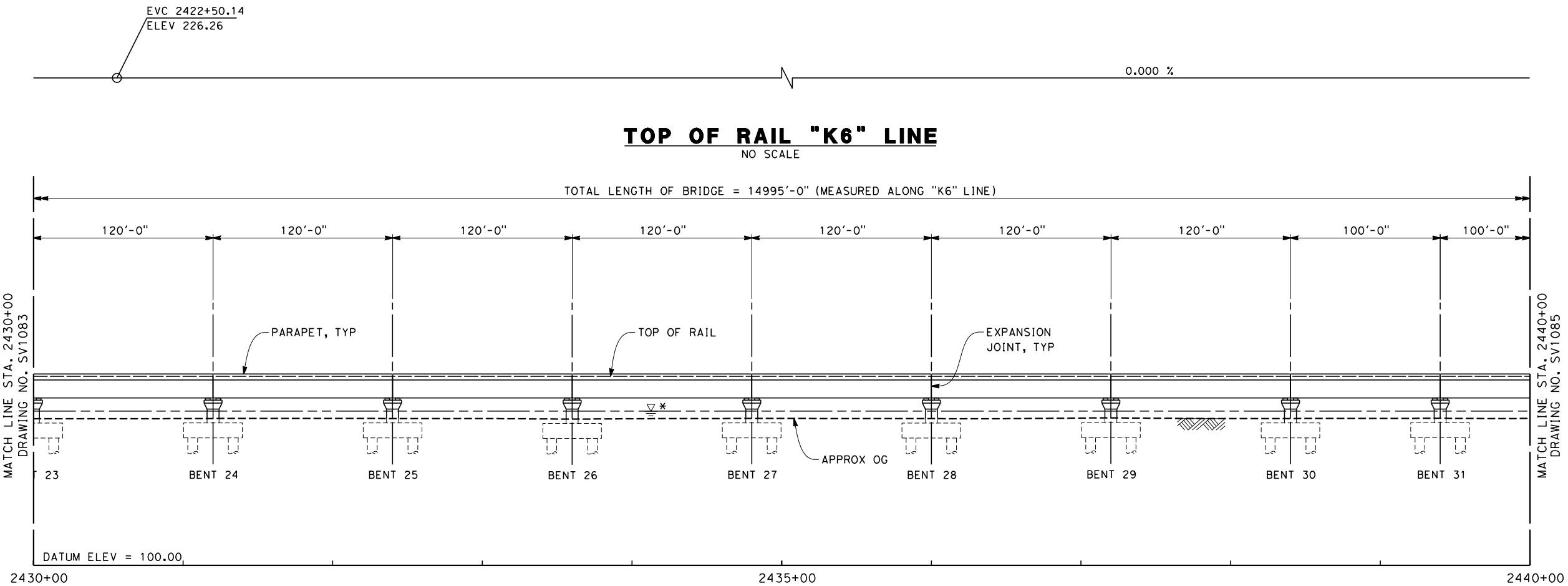
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

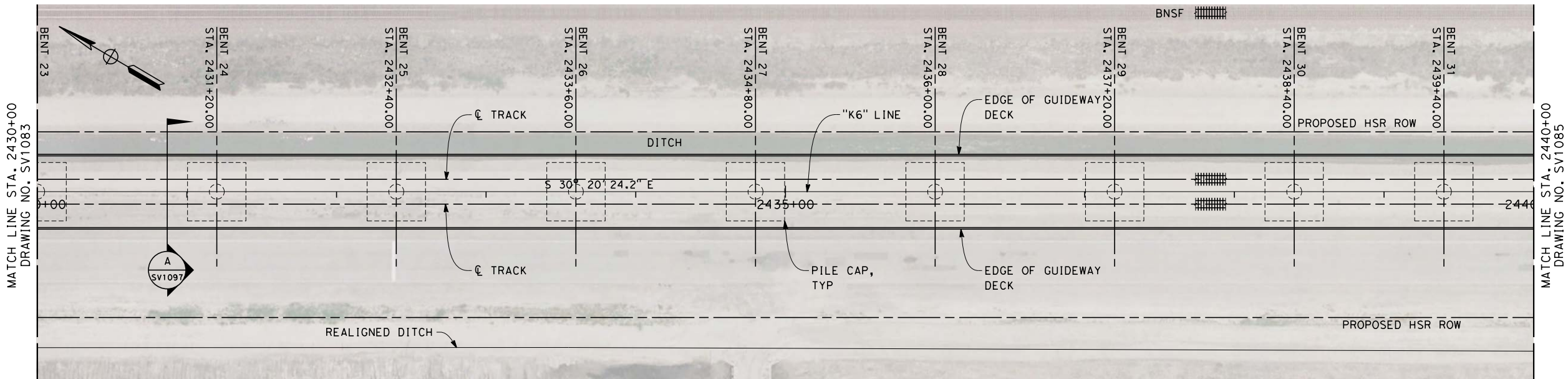
CONTRACT NO. HSR06-0003
DRAWING NO. SV1083
SCALE AS SHOWN
SHEET NO. 4 OF 18



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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



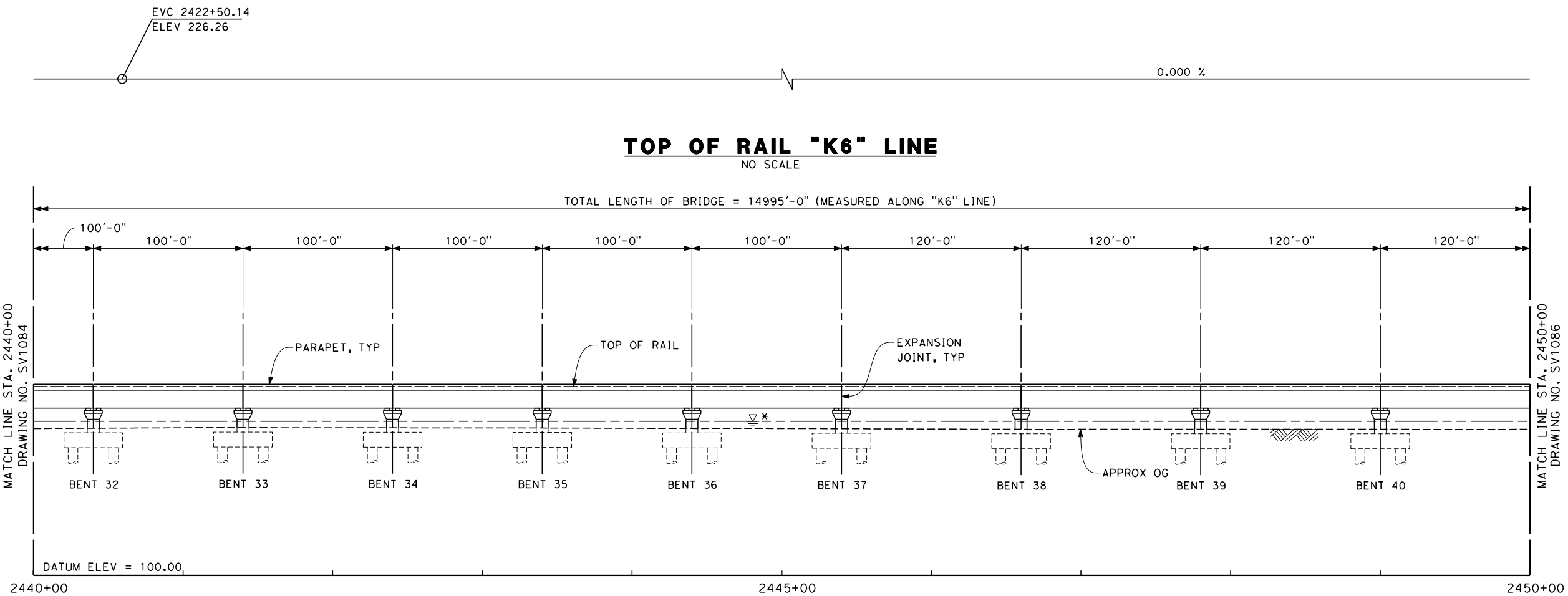
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

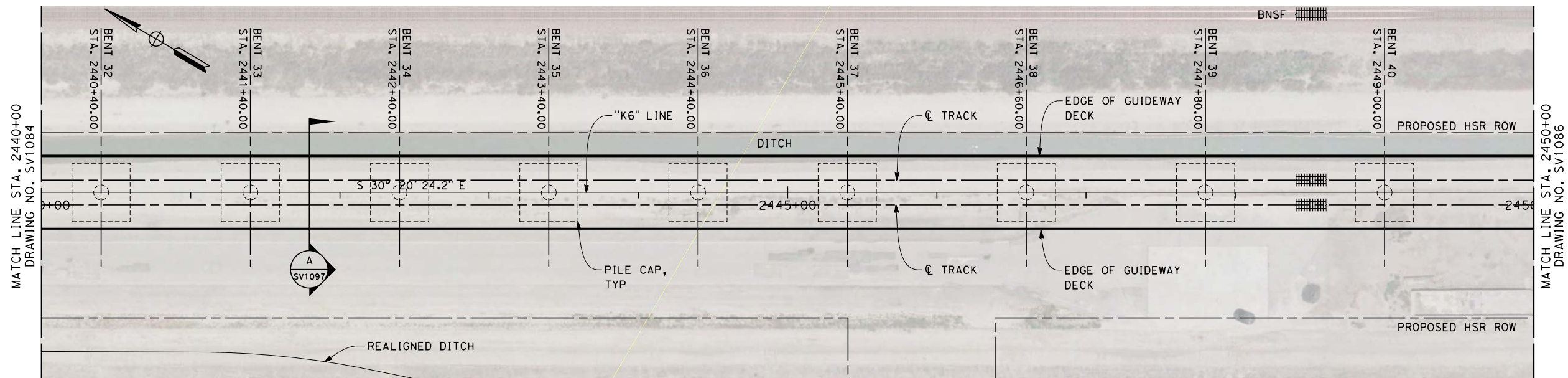
CONTRACT NO. HSR06-0003
DRAWING NO. SV1084
SCALE AS SHOWN
SHEET NO. 5 OF 18



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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



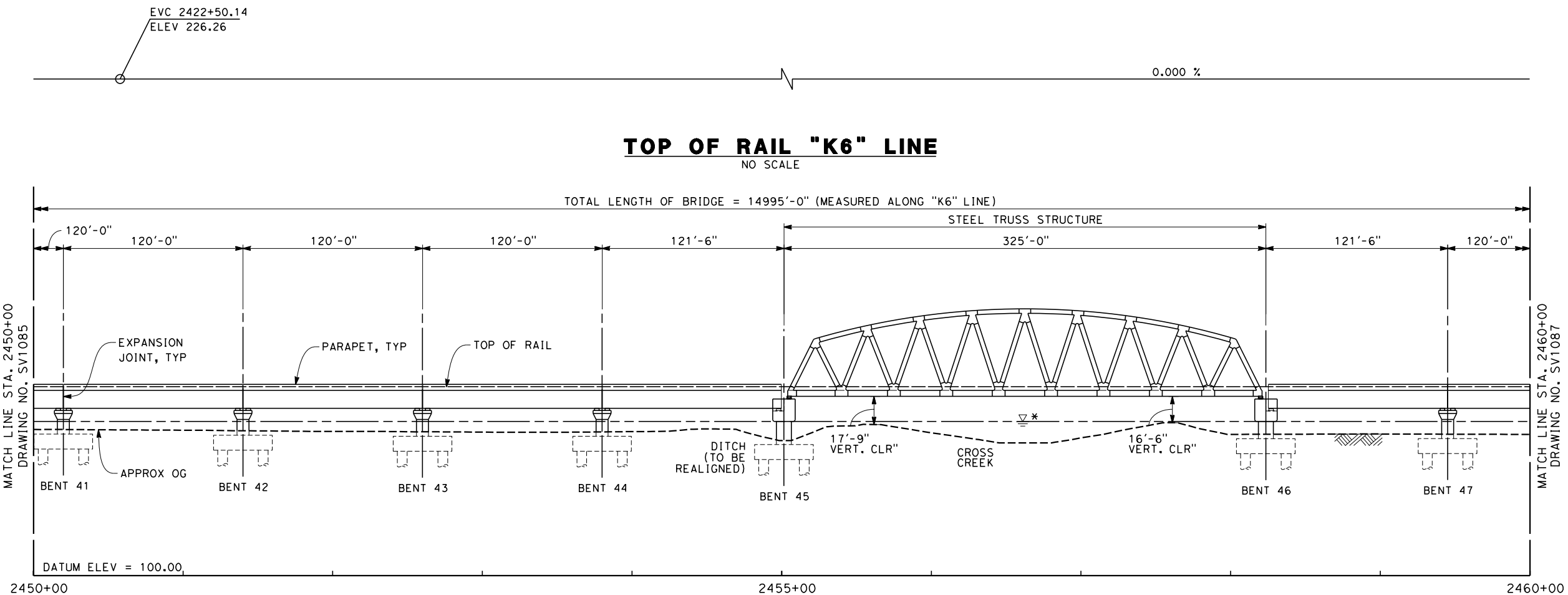
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

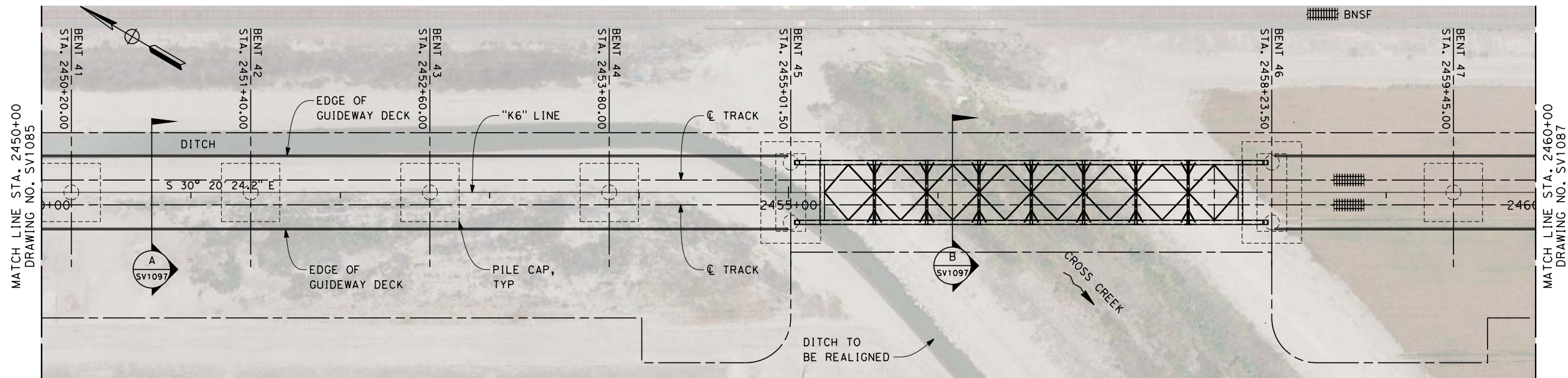
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DRAWING NO. SV1085
SCALE AS SHOWN
SHEET NO. 6 OF 18



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**ELEVATION**  
SCALE 1" = 40'



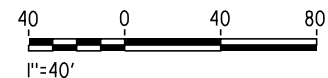
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



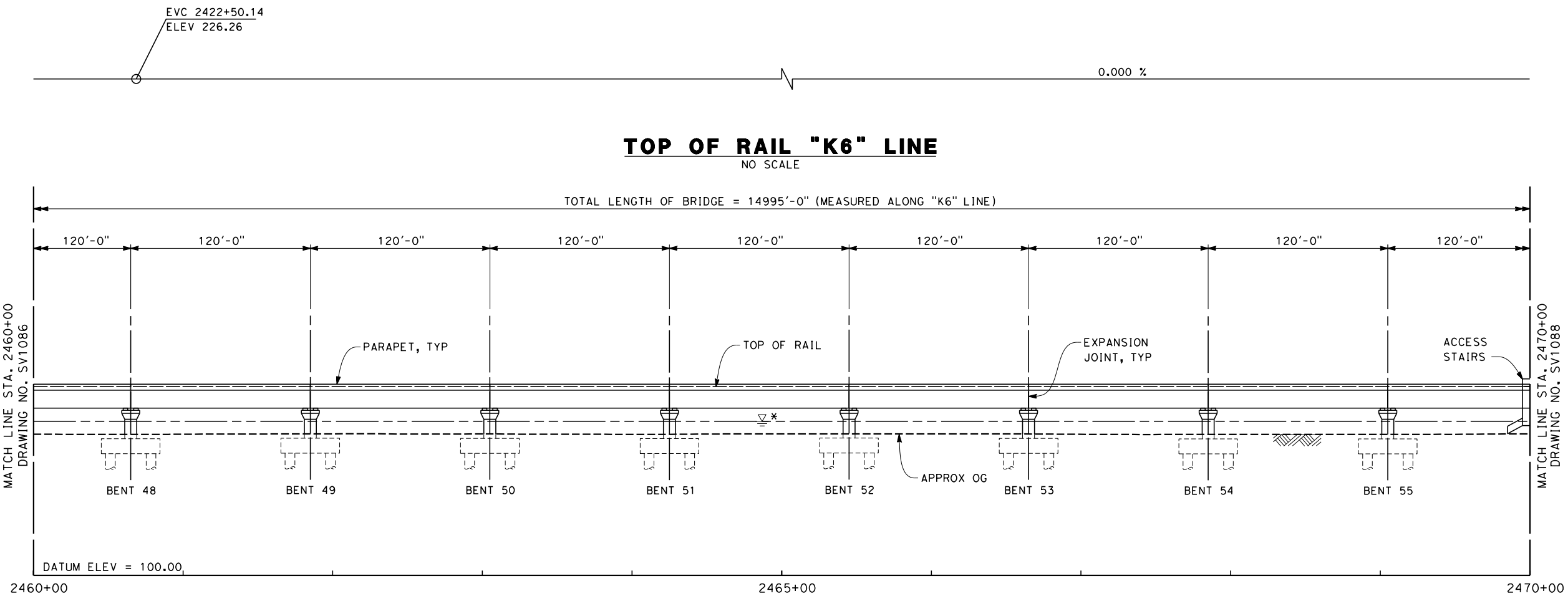
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

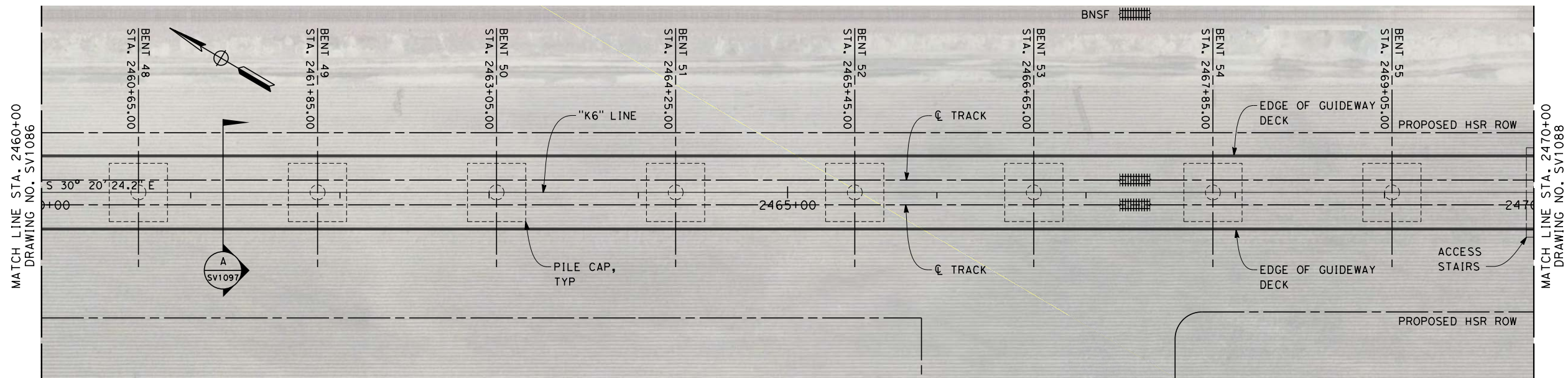
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DRAWING NO. SV1086
SCALE AS SHOWN
SHEET NO. 7 OF 18



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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

CONTRACT NO. HSR06-0003
DRAWING NO. SV1087
SCALE AS SHOWN
SHEET NO. 8 OF 18



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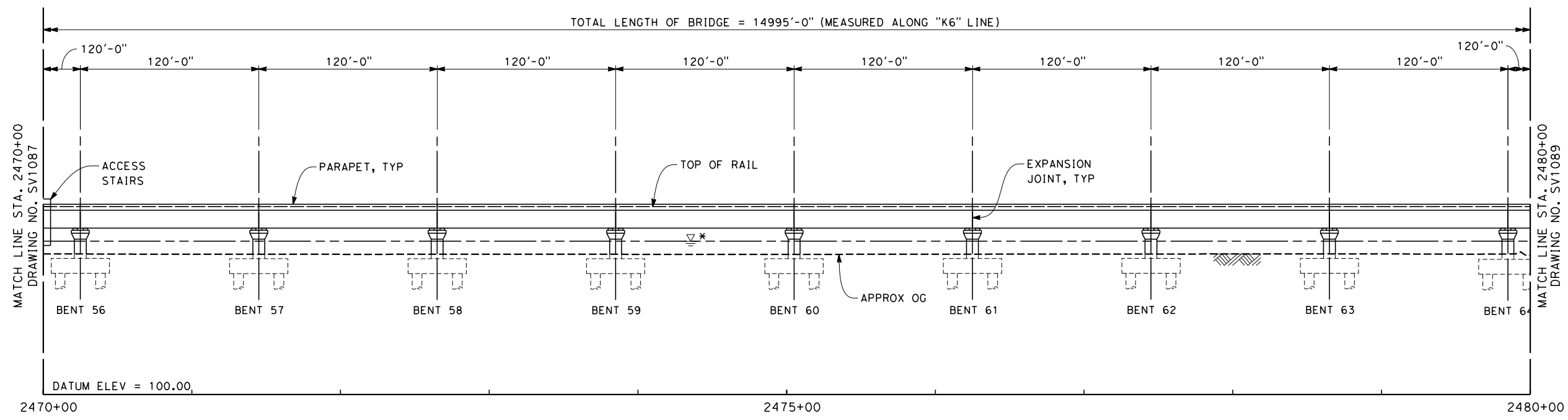
BVC 2543+85.20  
ELEV 226.26

0.000 %

# TOP OF RAIL "K6" LINE

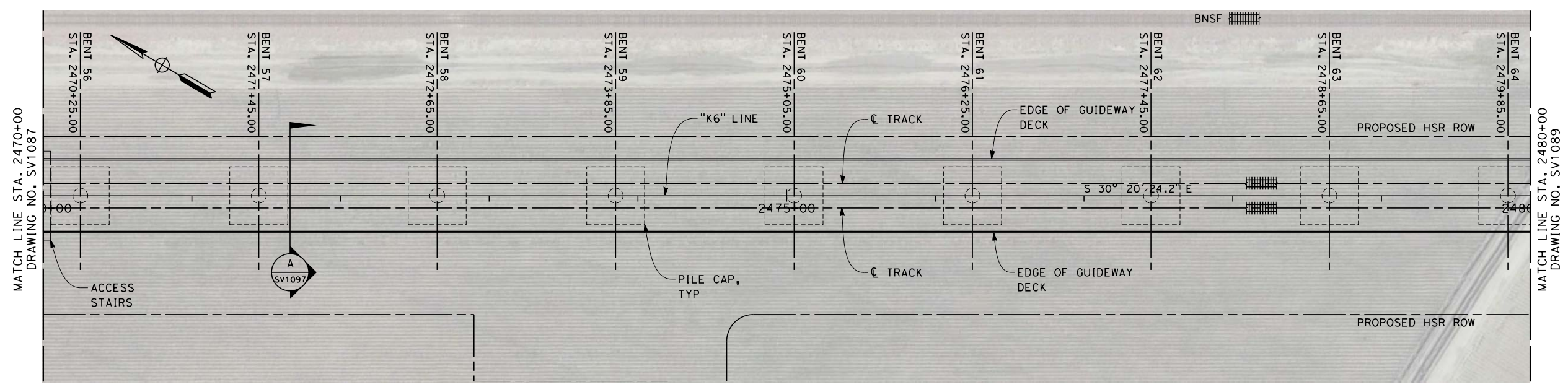
NO SCALE

TOTAL LENGTH OF BRIDGE = 14995'-0" (MEASURED ALONG "K6" LINE)



## ELEVATION

SCALE 1" = 40'

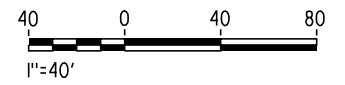


## PLAN

SCALE 1" = 40'

- ### NOTES
1. NOT ALL PILES SHOWN
  2. PILE LENGTH TO BE DETERMINED
  3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
  4. UTILITY LOCATIONS TO BE DETERMINED
  5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- ### LEGEND:
- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
  - \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
M. FISHER  
DRAWN BY  
F. PALERMO  
CHECKED BY  
A. ARMSTRONG  
IN CHARGE  
R. COFFIN  
DATE  
12/31/13

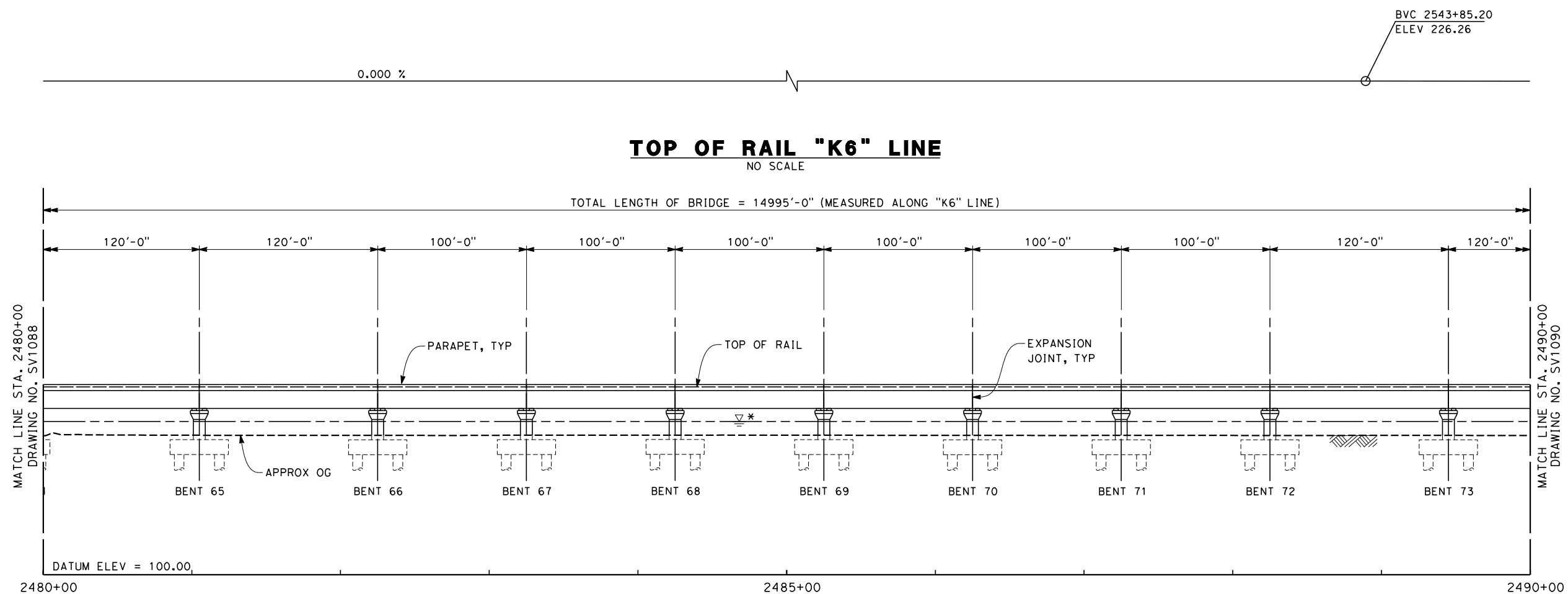
**RECORD SET 15%  
DESIGN SUBMISSION**  
  
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**  
KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

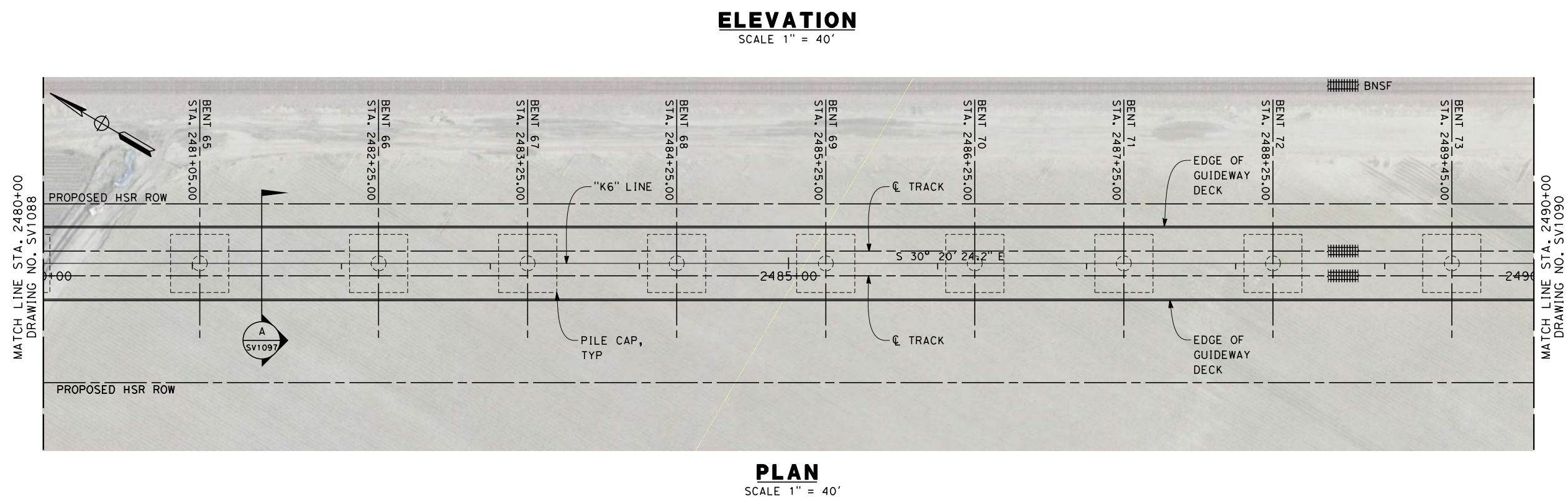
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HSR06-0003  
DRAWING NO.  
SV1088  
SCALE  
AS SHOWN  
SHEET NO.  
9 OF 18





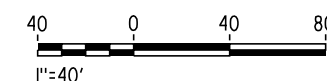
## NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST  
IN-SITU  
STEEL TRUSS - INSITU, SLID  
OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND  
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4. UTILITY LOCATIONS TO BE DETERMINED
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LEGEND:

- ① STRUCTURE APPROACH SLAB  
② RETAINING WALL  
\* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION  
-  
NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

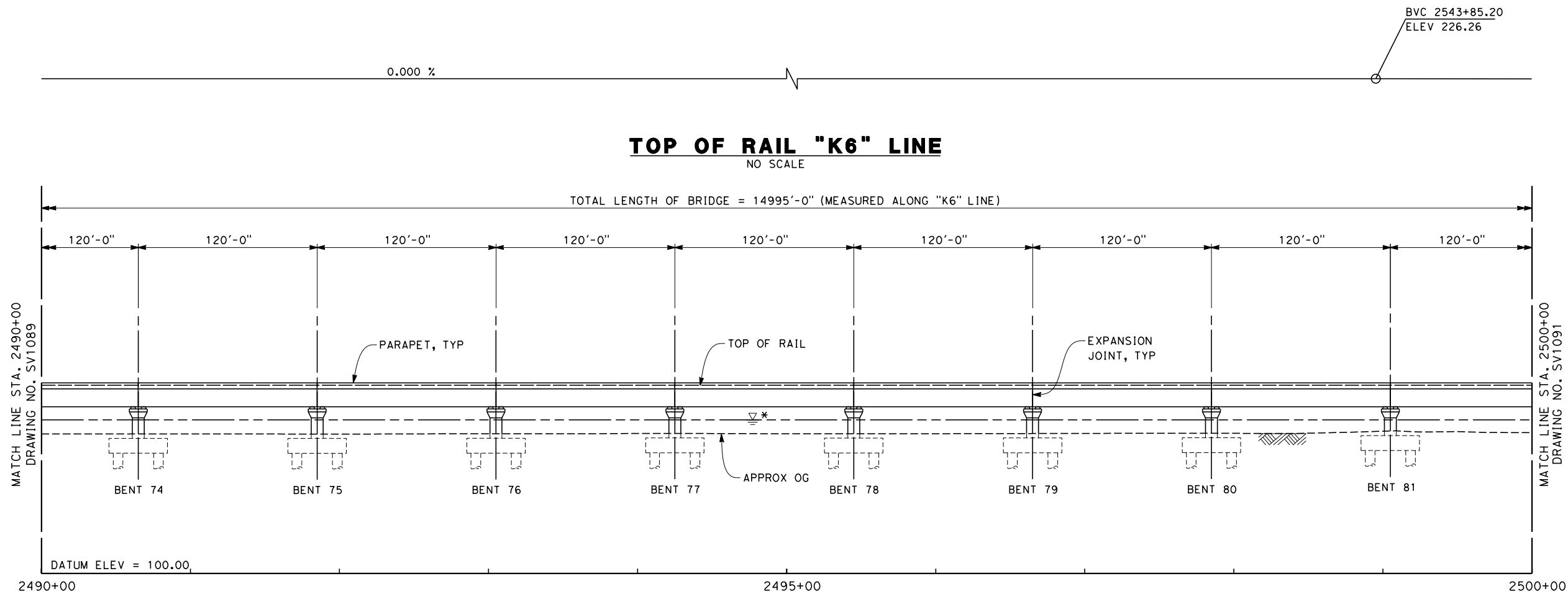
KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

CONTRACT NO.	HSR06-0003
DRAWING NO.	SV1089
SCALE	AS SHOWN
SHEET NO.	10 OF 18

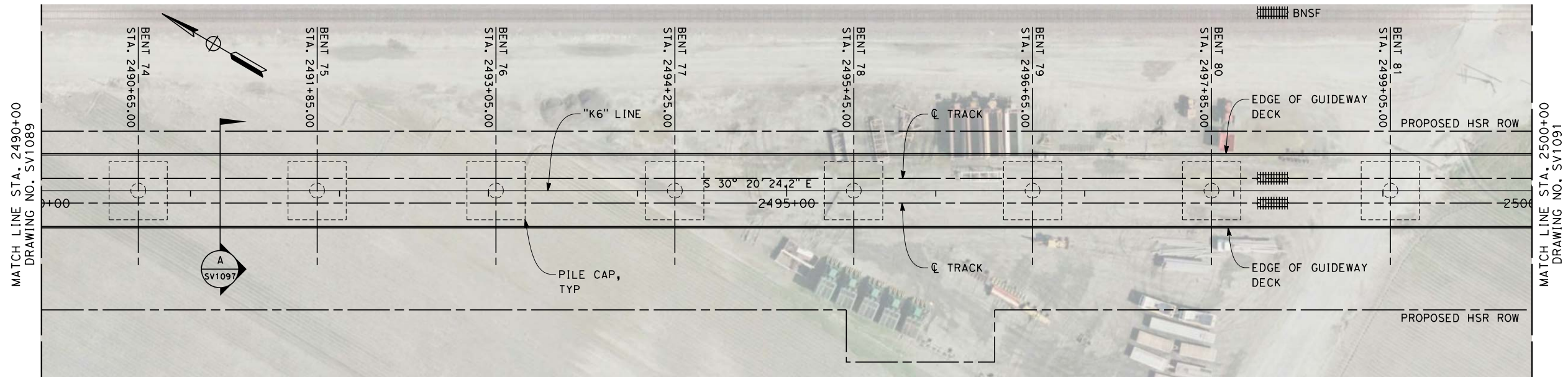
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**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



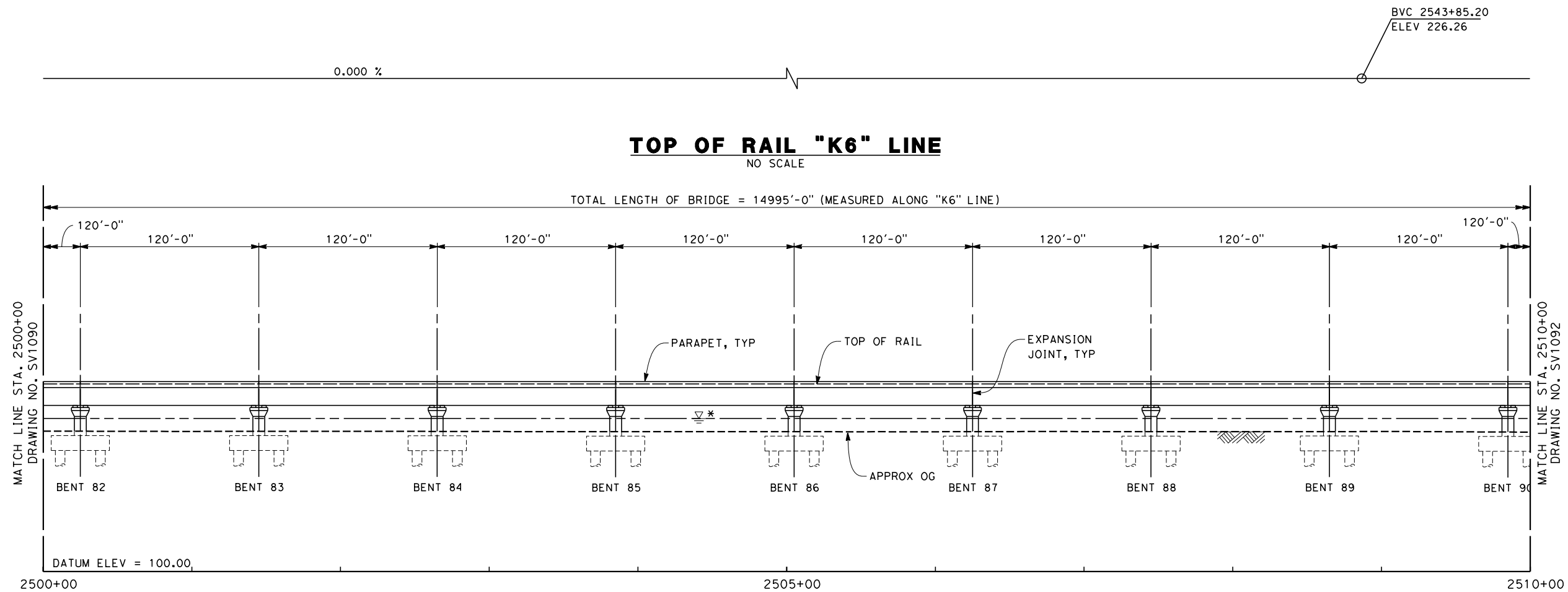
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

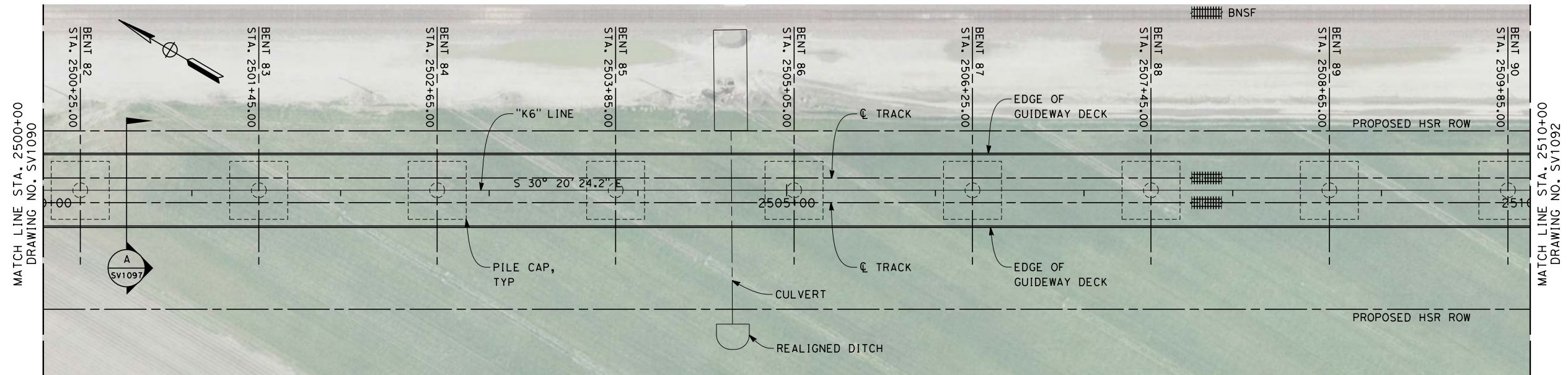
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DRAWING NO. SV1090
SCALE AS SHOWN
SHEET NO. 11 OF 18



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**ELEVATION**  
SCALE 1" = 40'



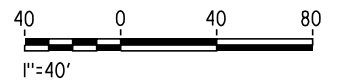
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



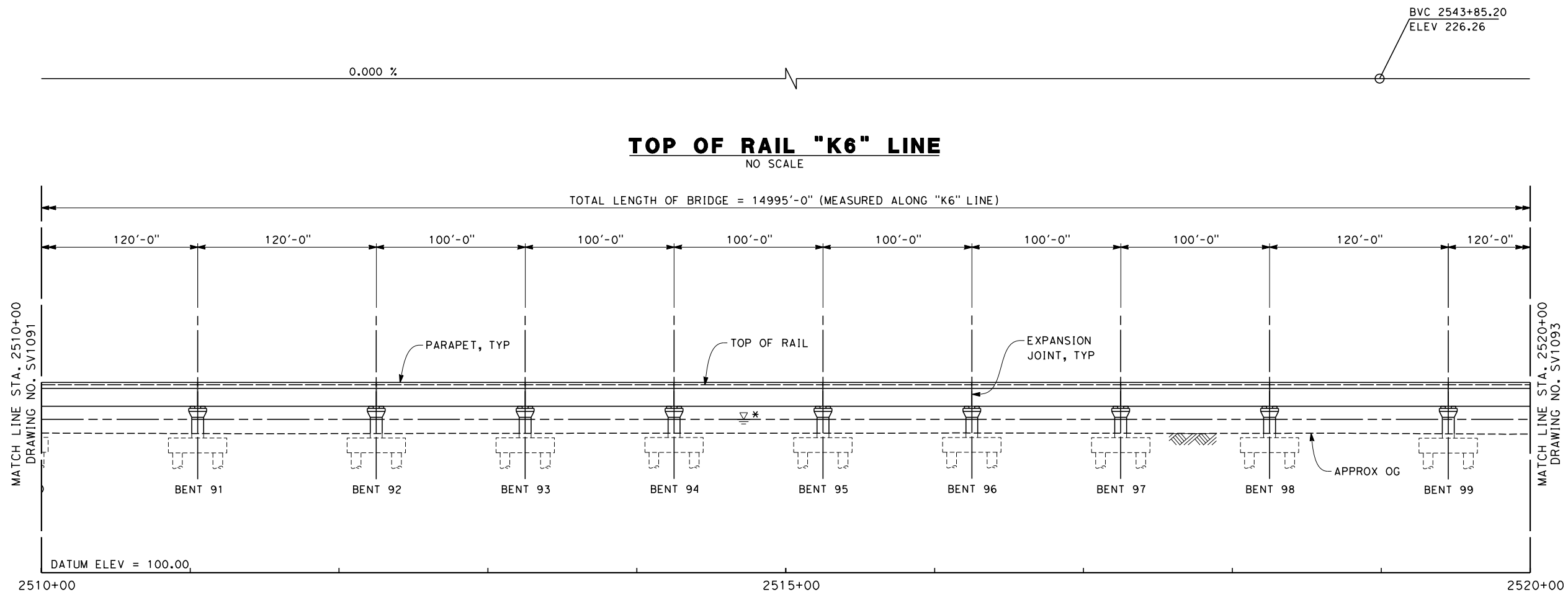
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

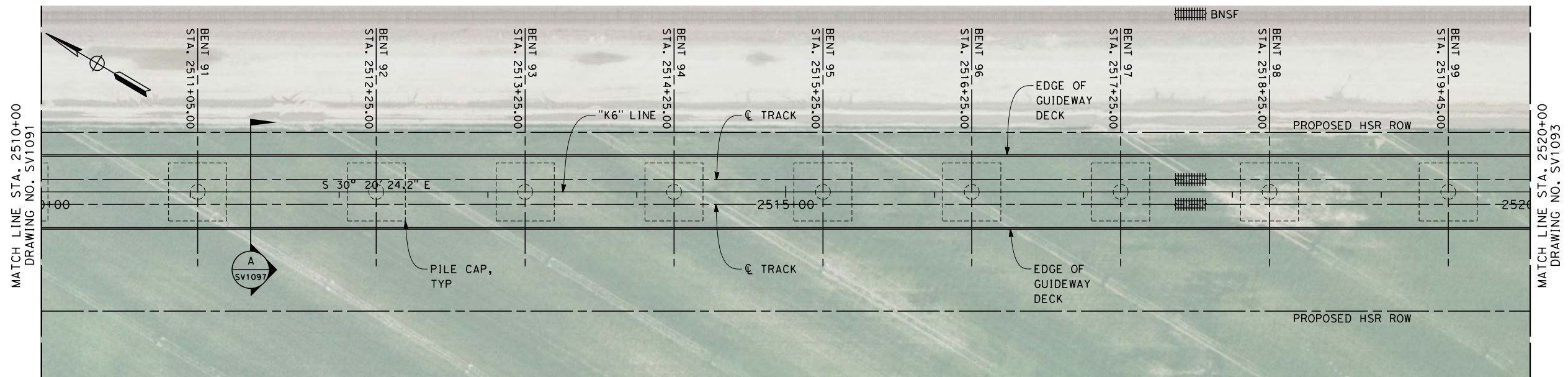
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DRAWING NO. SV1091
SCALE AS SHOWN
SHEET NO. 12 OF 18



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**ELEVATION**  
SCALE 1" = 40'



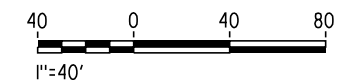
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
  - ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>

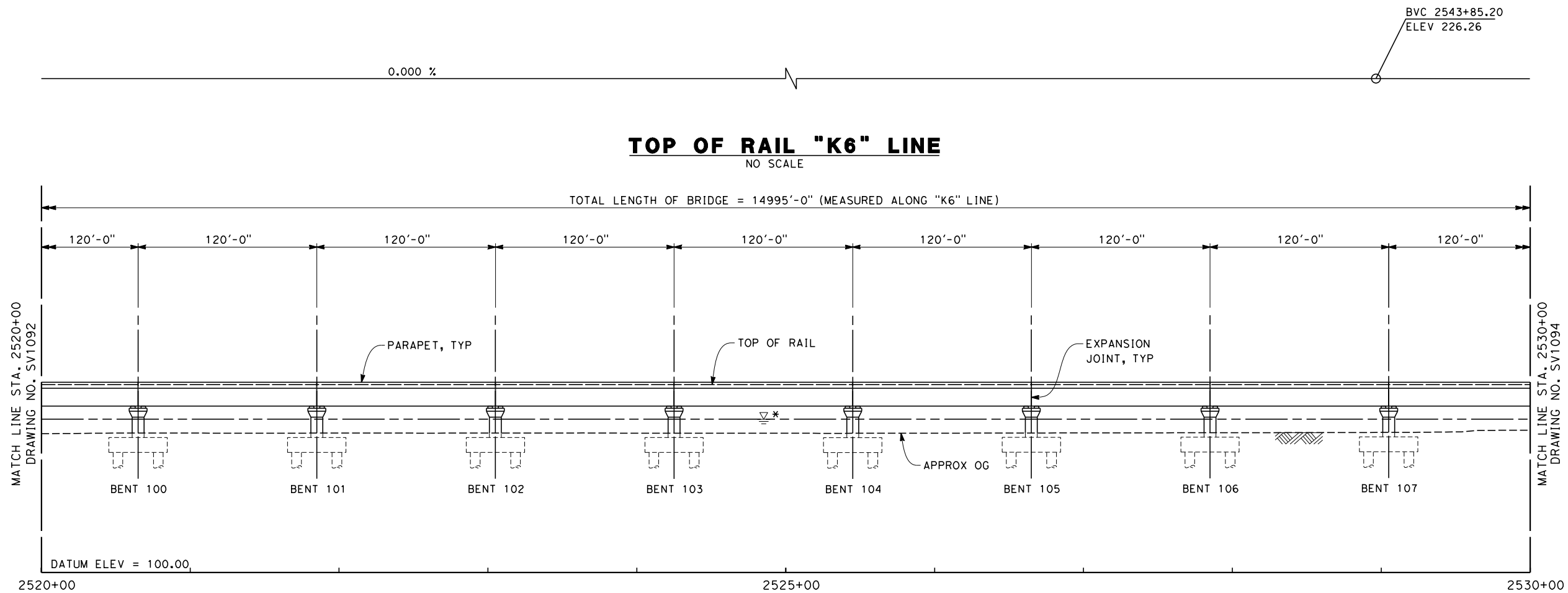


<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>
KAWEAH SUBSECTION ALIGNMENT K6 CROSS CREEK VIADUCT PLAN AND PROFILE

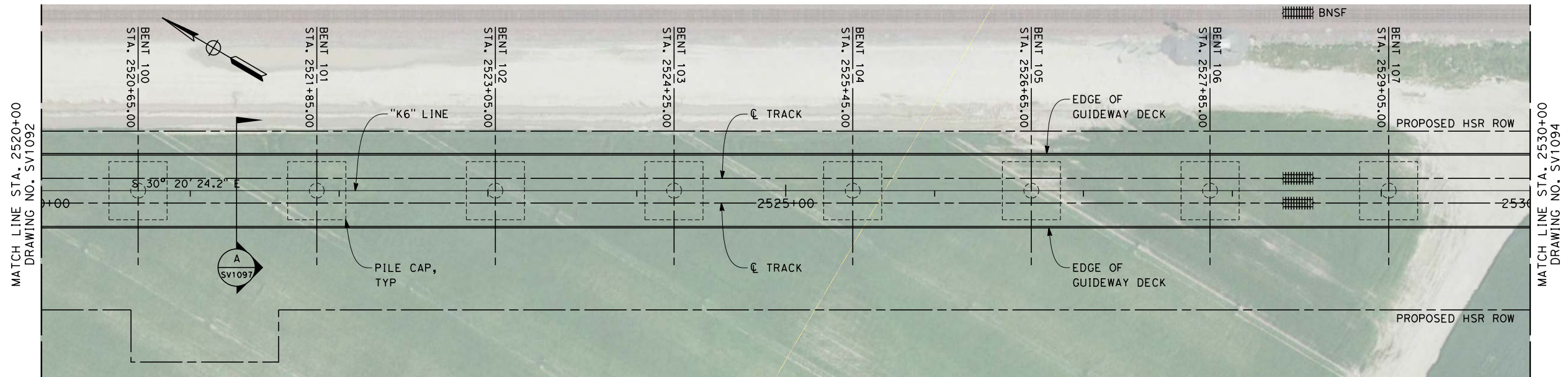
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DRAWING NO. SV1092
SCALE AS SHOWN
SHEET NO. 13 OF 18



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andrew.armstrong 12/12/2013 2:39:54 PM



**ELEVATION**  
SCALE 1" = 40'



**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

CONTRACT NO. HSR06-0003
DRAWING NO. SV1093
SCALE AS SHOWN
SHEET NO. 14 OF 18



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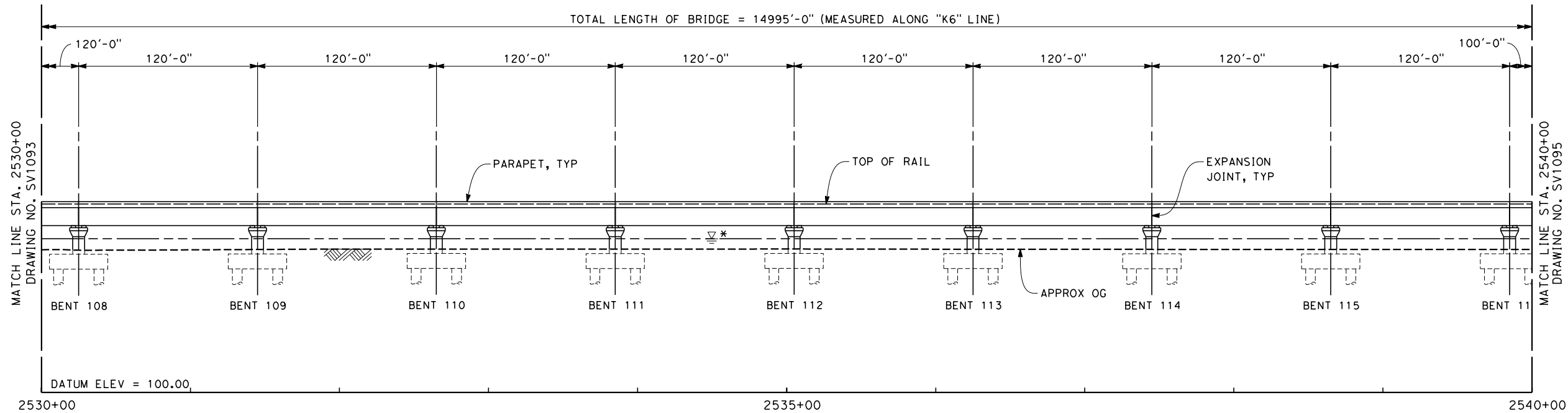
BVC 2543+85.20  
ELEV 226.26

0.000 %

# TOP OF RAIL "K6" LINE

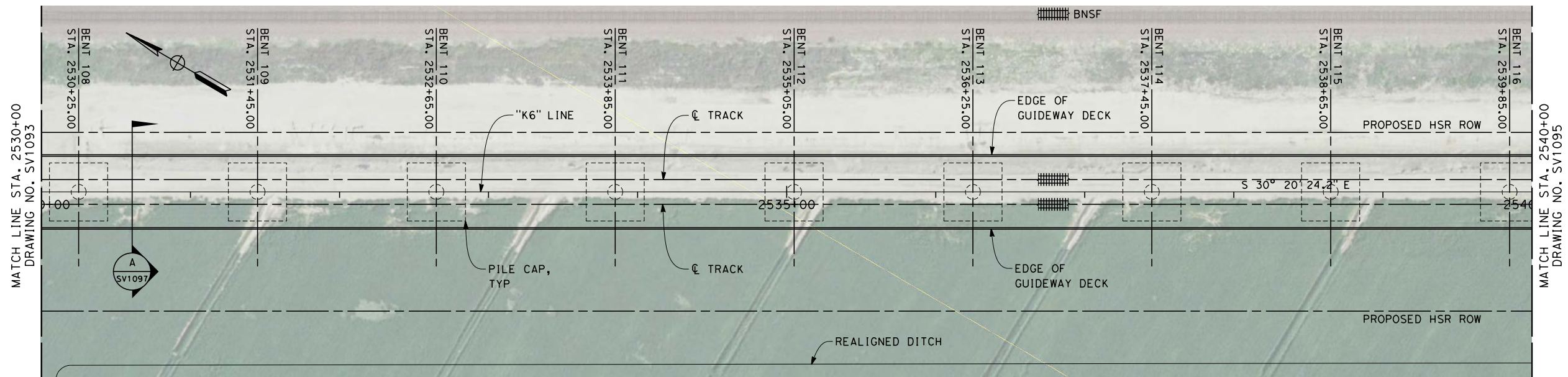
NO SCALE

TOTAL LENGTH OF BRIDGE = 14995'-0" (MEASURED ALONG "K6" LINE)



## ELEVATION

SCALE 1" = 40'



## PLAN

SCALE 1" = 40'

### NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
STEEL TRUSS - INSITU, SLID OR LAUNCHED  
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

### LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



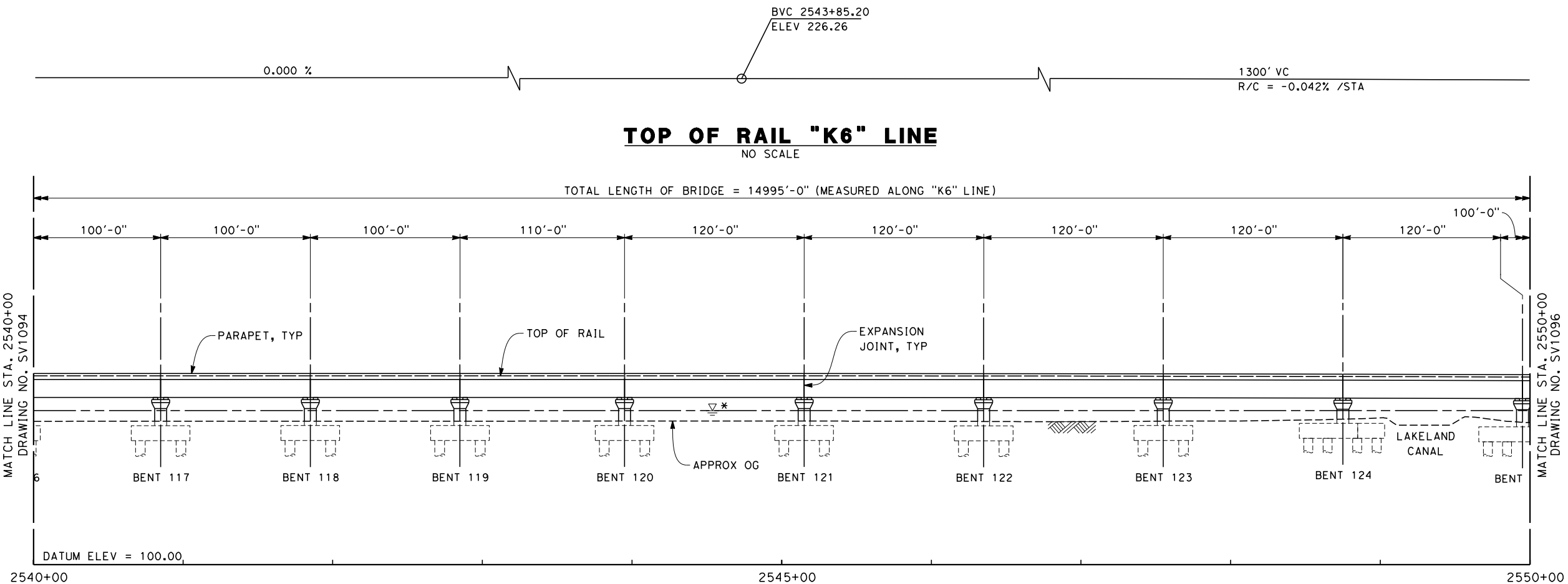
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

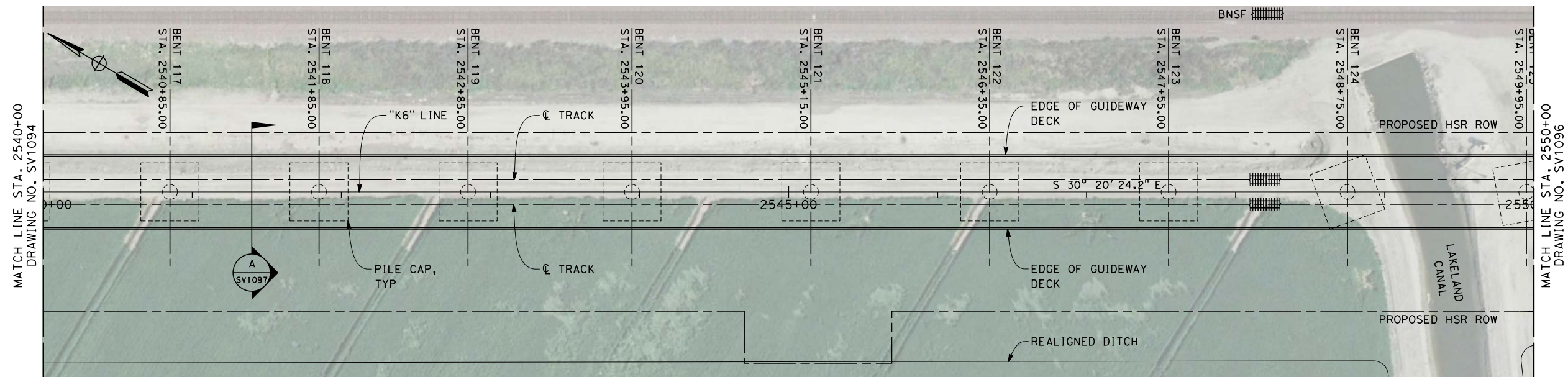
CONTRACT NO. HSR06-0003
DRAWING NO. SV1094
SCALE AS SHOWN
SHEET NO. 15 OF 18



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**ELEVATION**  
SCALE 1" = 40'



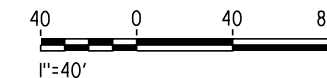
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
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IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



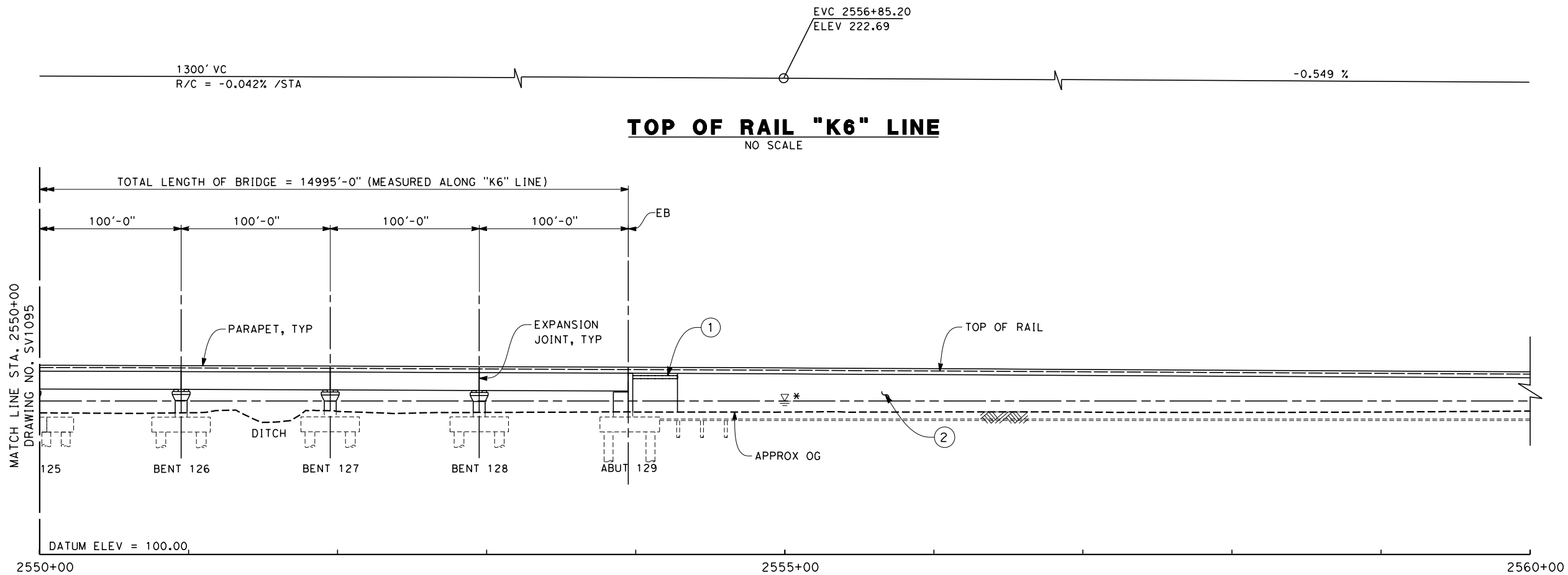
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
PLAN AND PROFILE

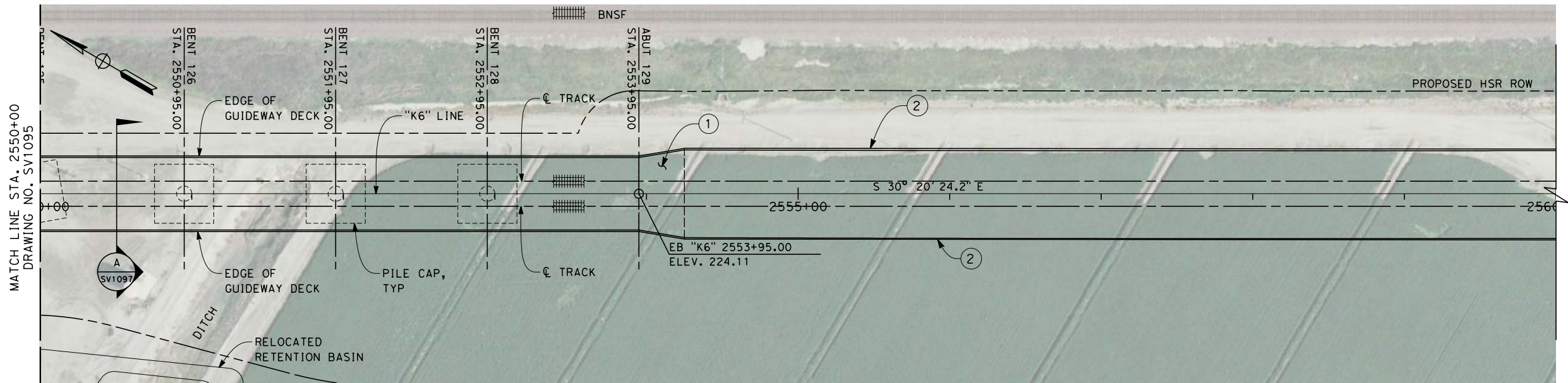
CONTRACT NO. HSR06-0003
DRAWING NO. SV1095
SCALE AS SHOWN
SHEET NO. 16 OF 18



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**ELEVATION**  
SCALE 1" = 40'



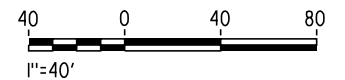
**PLAN**  
SCALE 1" = 40'

**NOTES**

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON  
SIMPLE SPANS - MSS OR FLPM  
CONTINUOUS SPANS - BCC - PRECAST IN-SITU  
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**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- \* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

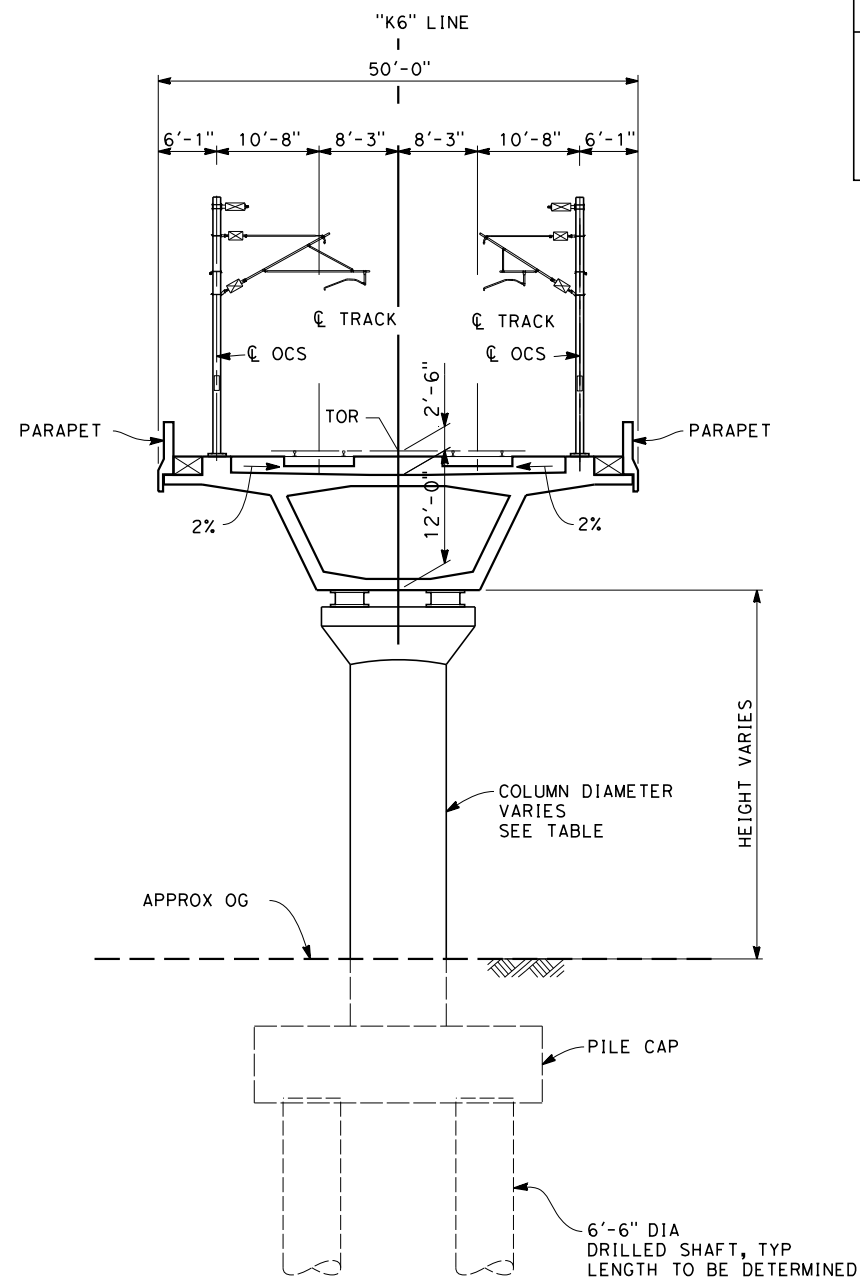
<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD</b>	CONTRACT NO. HSR06-0003
KAWEAH SUBSECTION ALIGNMENT K6 CROSS CREEK VIADUCT PLAN AND PROFILE	DRAWING NO. SV1096
	SCALE AS SHOWN
	SHEET NO. 17 OF 18



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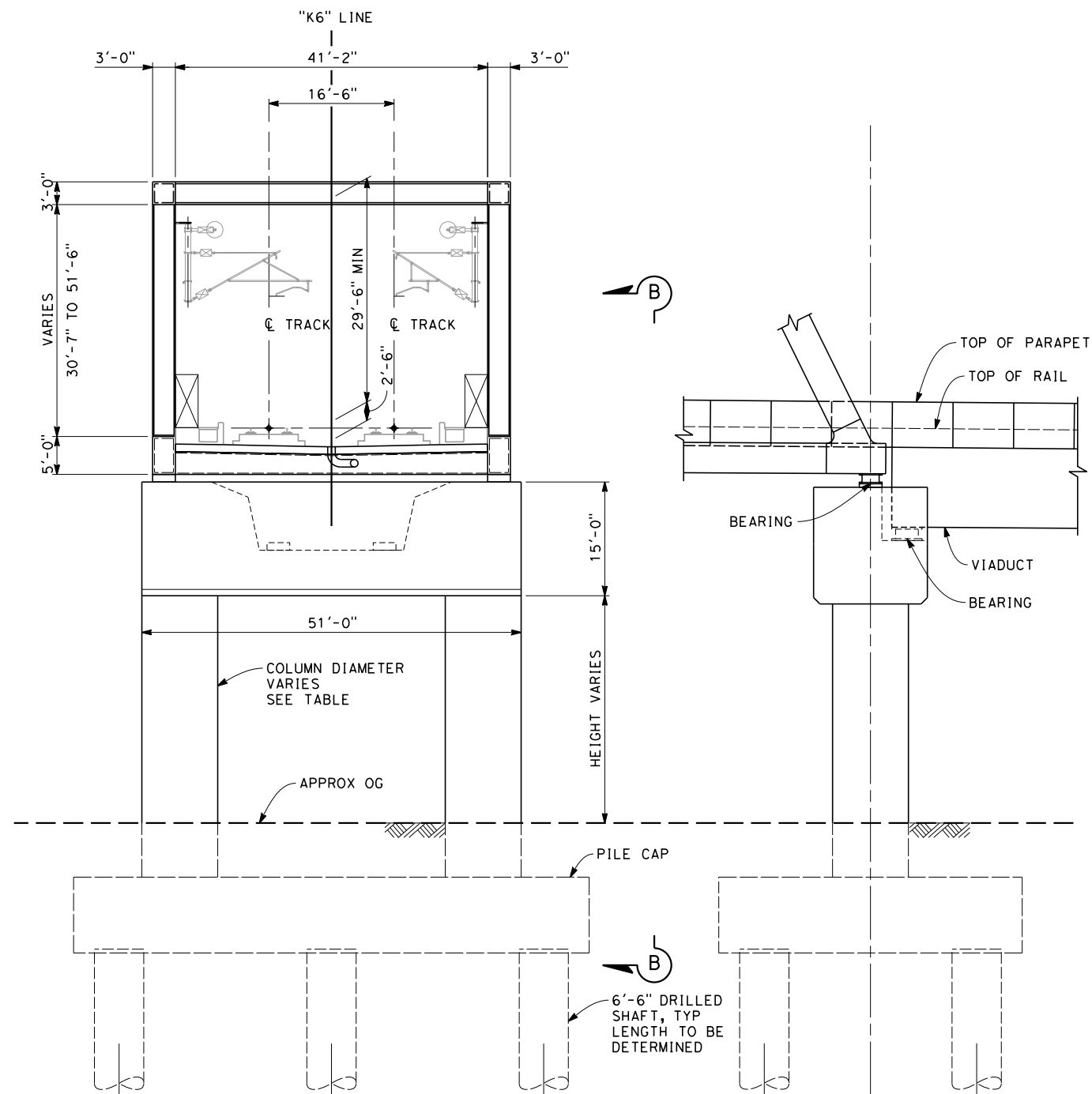
### SECTION A

SCALE: 1" = 10'

STA 2404+00 THROUGH 2455+02  
STA 2458+24 THROUGH 2553+95

NOTE:  
1. MINIMUM DIMENSION FROM SOFFIT TO  
TOP OF FOUNDATION SHALL BE 16'.

COLUMN DIAMETERS	
COLUMN HEIGHT	DIAMETER
< 20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



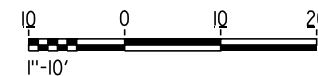
### SECTION B

SCALE: 1" = 10'

STA 2455+02 THROUGH 2458+24

### SECTION B-B

SCALE: 1" = 10'



REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

<b>RECORD SET 15% DESIGN SUBMISSION</b>
<b>NOT FOR CONSTRUCTION</b>



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
FRESNO TO BAKERSFIELD**  
KAWEAH SUBSECTION  
ALIGNMENT K6  
CROSS CREEK VIADUCT  
TYPICAL SECTIONS

CONTRACT NO. HSR06-0003
DRAWING NO. SV1097
SCALE AS SHOWN
SHEET NO. 18 OF 18